DOCUMENT RESUME

ED 131 082 SP 010 644

AUTHOR Lazarsfeld, Paul F., Ed.
TITLE The Multi-Disciplinary Graduate Program in Educational Research. Final Report, Part VI; Essays.
INSTITUTION Pittsburgh Univ., Pa. Learning Research and Development Center.
PUB DATE Mar 75
NOTE 204p.; For introduction and other related documents, see SP 010 639-45

EDRS PRICE MF-$0.83 HC-$11.37 Plus Postage.
DESCRIPTORS Educational Policy; *Educational Research; *Evaluation; *Graduate Study; Higher Education; Humanistic Education; *Intellectual Disciplines; *Interdisciplinary Approach; *Policy Formation; Social Science Research; Social Sciences

ABSTRACT

This document, the sixth of a final report on the Multi-Disciplinary Graduate Program in Educational Research, is a collection of three essays. The first--Notes on the History of Interdisciplinarity--by Judy Rosen, brings together and outlines the general points and findings of the literature that has been generated in an attempt to evaluate the importance, success, and drawbacks of conducting research outside the limits of the traditional academic disciplines. It also places the notion of interdisciplinarity and the way in which it is now being discussed in historical perspective. The first two sections of this three-part essay discuss the central viewpoint and doctrine of the moral philosophers and the philosophy and history of the movement away from a unified social science and toward the isolated academic discipline. The third section discusses and assesses the current debate about how and why the social sciences should or should not attempt a reunification. The second essay--Alternative Approaches to Policy Making--by Merlyn Kettering, is an introduction to the study of policy-making. The framework developed in the essay dramatizes basic themes in policy-making by creating a controversy between rationalistic and incrementalistic approaches to policy-making. The third essay--Humanistic Evaluation-- was prepared as an internal memorandum for use by the committee on evaluation described in the body of the final report. It is intended as a foundation from which to generate a working image of humanistic evaluation. (MM)

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Final Report

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Final Report
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10/15/76

The Multi-Disciplinary Graduate Program in Educational Research

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LEARNING RESEARCH AND DEVELOPMENT CENTER

UNIVERSITY OF PITTSBURGH

March, 1975

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NOTES ON THE HISTORY OF INTERDISCIPLINARITY

Judy Rosen

The theme of interdisciplinarity has recurred consistently in both the dreams and the nightmares of organizers, funders and conductors of social scientific research since the close of the second world war. Today a major portion of both federally and privately funded social research identifies itself with this alleged innovation. A large, though not largely illuminating, body of literature has been generated in an attempt to evaluate the importance, success and drawbacks of conducting research outside the limits of the traditional academic discipline. This paper brings together and outlines the general points and findings of that literature. In addition, it attempts to put the notion of interdisciplinarity and the way in which it is now being discussed in some kind of historical perspective.

What is new in the last few centuries is not the unification of knowledge, but rather its fragmentation, division and classification. The social science disciplines as we know them emerged only at the end of the 19th Century, out of the umbrella social science of moral philosophy. The first two sections of the paper discuss, first, the central viewpoint and doctrine of the moral philosophers and second, the philosophy and history of the movement away from a unified social science and toward the isolated academic discipline. In the third section, we lay out and try to assess the current debate about how and why the social sciences should or should not attempt a reunification.

The line from moral philosophy through the separation of the social sciences to present attempts at their re-integration is

crooked in some places, broken in others. Everywhere it is suffused with these considerations: what role does morality (values, reason, subjectivity, or God, if you will) play in human science? What is the nature and origin of the categories with which social scientists approach their data? What are they seeking to explain and for what purpose? The ways in which the nineteenth century answered these questions sets the stage for today's conflicts over inter-disciplinary study.

The Enlightenment: Moral Philosophy

The reformation destroyed the Catholic unity of the medieval Church. There could never again be only one way of looking at the world. Freed from theology and from salvation dependent on works, science went to work on the world of the here and now, the world in all its "natural" glory.

The eighteenth century Enlightenment took up the course that the Reformation had started. Glorifying the Greeks who "deduced their morals from the nature of man rather than from the nature of God"[1] and who made their study of life one of organized criticism, the Enlightenment philosophers proclaimed philosophy (science) the supreme cure for myth and superstition. As Hegel wrote, "The pure insight characteristic of the Enlightenment, only appears in genuine active form in so far as it enters into conflict with belief."[2]

The philosophic method, more than anything else, was one of criticism. Freedom to criticize was demanded as a political right. Once invoked, it opened the way for the secularization of causality and the imposition of "rational, critical methods of study on social,

political, and intellectual developments."[3] This is not to say the philosophies thought everything discernable through reason. On the contrary, Enlightenment philosophy was an attempt to discover the limits of reason. While philosophy was not seen to explain everything, "other modes of inquiry explain nothing. Man is adrift on a sea of ignorance and uncertainty and philosophy is the only seaworthy craft afloat."[4] Nevertheless, to be critical in the philosophic sense is "not to give way to faded, supercilious skepticism, but to shift cannons of proof and direction of worship. What is at work in the incredulity of the philosophies is not the shrinking of experience to the hard, the measurable, the prosaic the surface of events; it is, on the contrary, an expansion of the natural. The disenchanted universe of the Enlightenment is a natural universe."[5]

It is precisely this natural universe, in all its many and diverse dimensions, that late eighteenth century moral philosophy, the breeding ground for the social sciences proper, took up. Its primary interest, however, was in the human aspect of the natural universe, an interest that was "bounded only by the activities of men."[6] Moral philosophy was an attempt at a comprehensive science of man; an attempt to lay the basis for an empirical study of human nature and its extension to man-made institutions and customs.

Moral philosophy is usually thought of as pure Ethics, and, in fact, its subjects were pervaded with the ultimate aim of proscriptions for moral methods of improving human relationships. "To be a moral philosopher was to be an analyst and interpreter of

the current mores, and at the same time a protagonist of new relationships thought by the philosopher to be more highly ethical and advantageous."[7] However, because it attempted to be empirical, moral philosophy ran the gamut of every form of social life in arriving at its ethical proscriptions. In one way or another it studied and discussed "human nature, social forces, progress, marriage and family relationships, economic processes, maintenance of government, international relations, elementary jurisprudence, primitive customs, history of institutions, religion, ethics and aesthetics."[8] Thus, in terms of both subject matter and its stress on empiricism moral philosophy was a matrix out of which the separate social sciences were later to emerge. What the social sciences forfeited was moral philosophy's ability to leave absolutely everything open to question in order to change and improve relations between people, and, consequently, its comprehensive world view. But this will be discussed later.

In discussing moral philosophy, I am referring to a group of Scottish intellectuals of the eighteenth century: Smith, Hume, Hutcheson, Monboddo, Lord Kames, Reid and Stewart. Relying heavily on Gladys Bryson,[9] who has relentlessly made a case for their importance to the development of social science, I will first discuss their general forms and styles of analysis and procedure, and then briefly describe how one of their members, Adam Smith, applied them. Hopefully, this will help clarify how they serve as a foundation for social science.

The methodology of moral philosophy was empirical in elementary form. It took experience as its base of induction and observation,

i.e., experience as it could be observed in the minds, lives, and social relations and institutions of the moral philosophers themselves. The reason for this was simple enough. Experience was knowable, observable. When an experience of a moral philosopher was confirmed by his observation of other people, it could be generalized into the universal. In this way, experience became human nature in concrete form. Human nature was the starting point of social life and therefore of the new science of man. Introspection and observation were its primary modes of investigation.

Moral philosophy conceived science as a systematized bodies of knowledge which could be characterized by a few very general principles or laws. These principles or laws were merely the generalization of experience. Their purpose was more the classification of observation than an understanding of how things work. Theirs was an attempt to present varied and chaotic phenomena in methodical form: to "sink the particular in the general." One of the main aims of this science was prediction. As Stewart put it:

> The ultimate object of philosophical inquiry is the same which every man of plain understanding proposes to himself, when he remarks the events which fall under his observation, with a view to the future regulation of his conduct. The more knowledge of this kind we acquire, the better can we accomodate our plans to the established order of things, and avail ourselves of natural powers and agents for accomplishing our purposes.[10]

This leads us right to the ethics of moral philosophy, for its ethic was exactly one of helping man's activities conform to the laws of his nature, as revealed in experience. Man's nature

and its manifestation in his social institutions and relations was seen to be a reflection of God's will. Human nature was an extension of physical nature. By responding to its dictates, man could not help but act morally (i.e., according to God's will).

But the guideposts to Good were selective. The moral philosophers extolled sentiment, emotion and passion as the basis for ethical action. These "moral senses" were "simpler to explain, surer as items of experience, and more effective as agents in human activity,"[11] as well as more universal, than was the Reason of past Metaphysics. In addition, Reason was not seen to be based in experience, hence, it could be director of action only at the expense of moral philosophy's life blood.

Thus, moral philosophy took general principles and laws of man's nature, as revealed in experience and social relations and institutions, as the scientific cue to moral action. Its purpose was to predict and to have some control over the social relations of individual men and women.

The Example of Adam Smith

This is not the place for a detailed analysis of Adam Smith's work. I use it only to demonstrate and clarify how moral philosophy went about deciphering the chaos of the eighteenth century. I choose Adam Smith because his work is probably best known of the moral philosopher's and illustrates the above description of their mode of analysis quite well.

Smith starts from what he sees in man's nature: his self-interest -- self-interest that is a matter of passion and sympathy. More than fifteen years before the Wealth of Nations appeared, Smith's Theory of Moral Sentiments was published. It dealt with the question of how man, who is naturally selfish, can make moral judgements. His answer is that it is man's ability to put himself in the position of an impartial observer that allows morality.[12] Throughout the rest of his work, this becomes Smith's standard. The moral choice is the one an impartial observer would approve.

But, in his later economics, Smith develops a chain of checks and balances that insures a moral system of society -- in case of the absence of an imagined arbiter. Man's interest in securing wealth is tempered by competition, through the market. The market determines the price of goods, how much and what is produced, and the movement of capital, labor and wages. Smith's theory of the market, however, merely describes the behavior which "gives society its cohesiveness."[13] The division of labor accounts for its movement along the line of increasing productivity, accumulation, which would raise wages, and its counterbalance in laws of population that would increase the rate of reproductivity as wages rise.

These general principles surface out of the sea of detail that comprises the Wealth of Nations. Starting with the observables of experience, (from the details of pin production to salt money in Abyssinia) Smith induces the laws of human nature which explain the particulars of the social system he saw. But, he is also looking

for principles of action: "Adam Smith is writing to his age, not to his classroom; he is expounding a doctrine which is meant to be of importance in running an Empire, not an abstract treatise for scholastic distribution. The dragons which he slays (such a mercantilist philosophy...) were alive and panting, if a little tired, in his day..."[14]

Smith saw mercantilist philosophy and practice as alien to the interests of providing the wealth of the nation (as opposed to the merchant and manufacturing class):

> That it was the spirit of monopoly which orignially both invented and propagated this doctrine, cannot be doubted; and they who first taught it were by no means such fools as they who believe it ... the interested sophistry of merchants and manufacturers confounded the common sense of mankind. Their interest,is, in this respect, directly opposite to that of the great body of the people.[15]

Mercantilism's worst crime, however, was that it was un-natural. It defied the laws of human nature and thereby of the will of God:

> ...by acting accordingly to the dictates of our moral faculties, we necessarily pursue the most effectual means for promoting the happiness of mankind, and may therefore be said, in some sense, to co-operate with the Deity, and to advance as far as in our power, the plan of Providence. By acting otherwise, on the contrary, we seem to obstruct in some measure, the scheme which the Author of nature has established for the happiness and perfection of the world, and to declare ourselves, if I may say so, in some measure the enemies of God.[16]

Smith's ethics sought to naturalize man; to uncover the laws of his nature so that he could act in accord with them in the balance and harmony for which God had laid the basis. That Smith's laissez -

faire became the religion of early industrial capitalism was much more a product of history than of his intent.

In terms of the emergence of the social sciences, particularly of economics in this case, Smith's ideas were transitional, as was his time. He lived at the early stages of market society. In the age that gave birth to his world, there was no need for economics:

> A separate, self-contained economic world has not yet lifted itself from its social context. The world of practical affairs was inextricably mixed up with the world of political, social and religious life ... who would look for abstract laws of supply and demand, or cost, or value, when the explanation of the world lay like an open book in the laws of the manor and the church and the customs of a life time?[17]

With Smith, economics begins to emerge, but it cannot yet stand alone. There is still a God at its center, even if he is a new one. The standard economic variables (like land, labor and capital) cannot be manipulated for their own sake. They are still accountable to a moral system. It is not until the late nineteenth century that accountability can be seen for the corpse that it is.

Smith lived before men and women made the division of labor and machinery revolutionary. The movement of the industrial society he saw growing was slow, continuous, evolutionary, and quantitative. He did not live to see the gross qualitative changes in people's lives and institutions that the industrial revolution wrought. "His, therefore, are the dynamics of a static community; it grows but it never matures."[18] He described the society he lived in.

After Smith died his society did mature. As the division of labor that he saw as central took place to ever greater extents,

all aspects of life began the process of separation. As they did, so did the social sciences that sought to understand them. Yet, with few exceptions, the social sciences that were growing into disciplines in the nineteenth century never seemed to take into account that they had witnessed a revolution; that they lived in and studied a society that was qualitatively different from that which had previously existed. They continued moral philosophy's search for universals that would explain the evolution of a society that changed only quantitatively.

Positivism and Empiricism

Contrary to the early Enlightenment's appeal to facts, which had been for the purpose of challenging the system of absolutist control and belief, the nineteenth century's worship of the empirical assumed acceptance of the world it attempted to objectively reflect. Moral philosophy's habits of integrated, critical thought were abandoned in the rush to accumulate data. There was no longer any time or place in the sciences of man for morality. For helpful reforms, there were plenty of suggestions, but because what was natural was right and inevitable (i.e., not subject to will) there was no question concerning the basic contours of society.

This was a gross distortion of moral philosophy's concept of nature. And the source of the distortion was the abandonment of morality. Moral philosophy was a comprehensive "science" only because it was moral. It looked for what was natural because nature

was God-given. The nature it sought was an idealized nature and not entirely phenomonological. One had to "see through" the details of experience to find it. Once nature, particularly human nature was discerned, it could pull the string to gather every aspect and every observation of experience into one world view. Human nature was the source of moral philosophy's unity, and the moral philosophers searched for it because it was the key to moral action.

The nineteenth century social sciences split off from each other only after fulfilling the prerequisite of splitting off from speculative philosophy, and thus from the realm of moral questions. Many a social scientist, both then and now would tell you that there were certain questions that stand outside the sphere of science -- all of them just happened to be the question of what should be in the world. Witness Comte: "Theological and metaphysical philosophy do not hold sway today except in the system of social study. They must be excluded from this final refuge. Mainly this will be done through the basic interpretation that social movement is necessarily subject to invariant physical laws, instead of being governed by some kind of will."[19] Thus, in continuing moral philosophy's search for empirical laws, the social science that emerge in the 19th century have left behind its goals of being philosophical. Rather than being held up to transcendent standards of the Good society, social life is demoted to supposedly neutral facts.

The process of that demotion, of course, was not quite so simple. The social sciences in the 19th century developed along several different, sometimes contradictory, lines at the same time. There

was no master plan by which they stripped off the cloak of morality, divided themselves along self-evident boundary lines and implanted themselves in academic departments. Each of the social sciences developed in a unique way, depending on the internal intellectual development of its subject, the specific institutional demands and conditions of national, political, and university systems, and the tolerance of existing disciplines. Here, we are most interested in the direction of their development; the movement toward "value-free science" and away from the problem-centered, reform-oriented inquiry of the 18th century. This is only one of many tendencies of social science in the 19th century, but it is one that I think is central to an understanding of why men began to see social life as a series of autonomous systems and of what implications this had for the nature of their budding disciplines.

The Example of Auguste Comte

The work of Auguste Comte systematized the ideas of the "neutral" tendency in social science, especially in regard to sociology. Comte's works appeared before the social sciences began to emerge, but nevertheless, provided a philosophical context and justification for their direction of development. In this sense, he "christened the social sciences many years before they were born." I will first discuss Comte's system and then the way in which the American social sciences emerged as its reflection.

The 1830's work of Auguste Comte did much to put sociology on the road to the "scientific objectivity" which was seen to be the true basis for its establishment as a separate academic

discipline. Marcuse summarizes Comte's contribution:

> Comte severed social theory from its connection with the negative philosophy (of the Enlightenment and specially Hegel) and placed it in the orbit of positivism. At the same time he abandoned political economy as the root of social theory and made society the object of an independent science of sociology. Both steps are interconnected. Sociology became a science by renouncing the transcendent point of view of the philosophical critique.[21]

In keeping with the moral philosophers before him, Comte sought an empirical science of man. His positive sociology would be modeled on the natural sciences: the phenomena of society would be treated as facts to be generalized into laws by the sociologist. As in natural science, the sociologist would make observations and establish linkages. Beyond the facts, nothing could be understood or empirically verified; therefore the search for underlying causes was abandoned:

> In the positive stage, the human mind, recognizing the impossibility of arriving at absolute notions, renounces the quest for the origin and destiny of the universe and the attempt to know the underlying causes of phenomena, and devotes itself to discovering, by means of a judicious combination of reason and observation, their actual laws, that is, their invariable relations of succession and similitude. The explanation of facts, thus reduced to their real terms, is henceforth nothing but the relation established between the various particular phenomena and a few general truths, whose number the advances of science tends increasingly to diminish. Cours de philosophei positive,...[22]

In addition, the concepts with which the sociologist analyzes his "data" were to originate solely in the data itself:

> The various irreducible laws which make up this order form a natural hierarchy in which each category is based on the preceding category according to their decreasing generality and increasing complexity ... Systeme de politique positive,...[23]

Ostensibly, this was to parallel the alleged "neut ality" of the natural sciences. A fact was a fact and only a fact. The sociologist-scientist's role was not to evaluate it or place it on any scale of importance, except one that measured its degree of complexity. Nevertheless, the consequences of Comte's notion of scientific neutrality turned out to be anything but neutral.

The goal of Comte's sociology was to "understand the necessary, indispensible and inevitable course of history in such ways as to promote the realization of the new (industrial and scientific) order."[24] The laws of society, like those of math and astronomy, were proclaimed not subject to human will. These laws were "an expression in abstract form of a natural principle operating through material (and/or human) objects."[25] Sociology could discover these laws and facilitate their movement in a previously determined direction, but it could never influence the direction itself. Comte's positivism took social reality as a basically unalterable given and thereby sanctioned it as salutary.

But, it was not solely on the basis of its inevitability that Comte hailed the new order. The primary allurement of industrial society was that science would permeate its every aspect. Not only physics and economics, but poetry and art would be determined by science. To Comte, this was the ultimate in man's control over nature -- both physical and human.

The laws of social movement, according to the positivist view of history, are a harmonious, universal progression toward the age of science and industry. All change and reform are therefore based on the spread of the scientific method in human intelligence. "Comte's science was meant to resolve the crisis of the modern world, to provide a system of scientific ideas that will preside over the re-organization of society.[26]

If scientific ideas were to be the entire foundation for the new order, it was essential that they be correct. The laws of social movement that sociology was to uncover were thus absolute; that is, absolutely precise in description and absolutely clear in determination and direction. Not surprisingly, this absolutism of scientific social laws led to a certain kind of relativism. Each stage of social development is relative to the general laws of evolution and is therefore right (by virtue of its provisional character) for its given moment of history. When it is no longer correct, the laws of harmonious progress will move it onward. Man has no choice. The question of the value or desirability of any stage or any one of its particular attributes is therefore outside the purview of sociology -- whose purpose is only to discover and not to judge its laws. The positivist quest for scientific neutrality leads to submission to the dictates of established phenomenal existence -- hardly a neutral, not to mention scientific, conclusion.

The most crucial aspect of Comte's conception of sociology for our purposes is the notion of the unity of the social sciences

that follows from it. Comte criticized the political economists of his time on two grounds; that they wanted to create an independent science of economics and that they would base economics on what he considered to be non-empirical abstractions. The social sciences could be separated only if they were founded on "metaphysical" abstractions. To Comte all phenomena are uniform in their "universal and necessary relatedness;" they are unified within a one-dimensional plane in a linear fashion. At its highest stage, sociology would uncover this plane:

> The methodological emphasis was on the idea of a unified science ... Comte wanted to found his philosophy on a system of "universally recognized principles ... unification is a matter of agreement among scientists whose efforts along this line will sooner or later yield a "permanent and definite state of intellectual unity." All the sciences will be poured into the same crucible and fused into a well-ordered scheme. All concepts will be put to the test of "one and the same fundamental method" until, in the end, they issue forth ordered in "a rational sequence of uniform laws" Positivism thus will "systematize the whole of our conceptions."[27]

With minor exceptions (which will be discussed later) this is amazingly similar to several contempory conceptions, of the possibilities for inter-disciplinary study.

Perhaps it appears ironic that Comte, who sought an absolute method by which to unite the social sciences, should be the founder of the separate social science of sociology. But, for several reasons the irony is an illusion. First, given positivist methodology, the 19th century social sciences share of the knowledge (data) explosion made some division of labor essential. Second, the abstractions of

economics were not as metaphysical as Comte thought. As discussed earlier, the industrial revolution brought about the apparent separation of social from economic life. Contrary to what Comte wanted to believe, this separation was reflected in the sciences, and not vice versa. Third, because positivist laws were consecutive and descriptive, they were easily separable. Unlike the dialectical view (to be discussed shortly) which attempted to cut a wedge in the pie of social relations, the positivist social sciences skimmed off the top crust and divided it amongst themselves. The only basis for its reintegration would be methodological because the phenomena they sought to describe were seen as next to but not expressive of each other.

The Emergence of the Separate Social Sciences

The social sciences of history, economics, psychology, sociology, anthropology, and political science developed as separate disciplines in the last quarter of the nineteenth century in America. Each has a unique though not autonomous history; yet, each developed in the common context of a rapidly expanding system of higher education, with all its attending origins and effects. As these sciences grew, both their styles of procedure and their goals reflected in ever more concrete form, the demands of the society that was pouring its money and its youth into the hopes for a trained and intelligent future. By the beginning of the 20th century, the American social sciences were well on their way to being the live embodiment of Comte's hopes for factual, systematic and slightly ameliorative sciences of man.

The demands that American society placed on its academic shoulders in this period were changing quickly, but led in one clear direction. Prior to the Civil War, the main purpose of higher education had been the acculturation of the "upper" class and the training of the clergy. After the Civil War, the problems of its after-effects (of reconstruction, taxation, etc) combined with the "take-off" of American industry and the perpetual depression of American agriculture to place higher education in the new position of providing technical and professional solutions and cadre for the strange new world that was appearing. The emergence of the separate social sciences and the direction of their early growth were a response to these demands.

The social sciences were nurtured in liberal arts colleges before they blossomed as full-blown disciplines with the public university systems. Two general factors account for this.[28] First, the passage of the Morrill Act in 1862 funded the development, within universities, of widespread and enormous technical and training programs for agriculture and the mechanical arts. These programs gained great prestige and importance by providing for the technical needs of every aspect of the business of wealth-getting, from mining and engineering to agriculture and the "exact" sciences. The offerings of the arts colleges, by comparison, looked rather pale and dilettantish. In order to compete with the now prosperous universities, they began to expand their curricula. Second, the introduction and popularization of the elective system carried this expansion of curricula into the exploration and discussion of whole new fields. The social sciences were initially introduced as minor topics within larger disciplines,

but as they were carefully examined in the relatively unpressured forum of the arts colleges, their potential technical contributions began to be discovered. That discovery, more than anything else, was behind their emergence and eventual institutionalization as separate academic disciplines.

The social sciences split off from their larger unity within moral philosophy in somewhat of a chain reaction. Prior to the Civil War, each of the fields mentioned earlier was discussed within moral philosophy. In addition, history found special attention in classics[29] courses, as did political science in those of law. Within many of the departments of moral philosophy, even prior to the Civil War, history, political economy and political science began to be taught in separate courses.[30] As history isolated itself from the classics, in its early stages, it discussed primarily constitutional and political questions of the past. Joint departments of history and political science were established in several of the schools that were to pioneer the establishment of the separate study of history.[31] It was not until the beginning of the 20th century, when historians began to look into past cultural, social and intellectual life that political science as a wholely independent field was able to emerge. As political economy courses explored the vast European and British literature of economics in view of the ever more pressing American economic situation, it left moral philosophy more and more in the realm of ethics. Sociology courses were taught beginning in the 1870's although as a legitimate academic department sociology was not fully recognized until the 90's. Anthropology had a slower start.

The first anthropology department was introduced (at the University of Pennsylvania) in 1886; others did not quickly follow suit, except within sociology departments, until the 20th century. Psychology had a fairly continual growth from the 1870's onward.[33] In general then, history, political science and economics had an early start though political science's full appearance was thwarted until after 1900; sociology, anthropology, and psychology began in the 1870's and 80's and grew fairly rapidly (though not at an equal pace with each other) from then on.[34](Table 1) A short discussion of the origins and early years of each of these disciplines may clarify the process of differentiation that they underwent.

The founding of the American Association for the Promotion of Social Science in 1865[35] brought the concept and the first studies of sociology into American academic daylight. Prior to this, several studies of slavery had come out of the South, among them Hughes' Treatise on Sociology: Theoretical and Applied and Fitzhugh's Sociology for the South, both in 1854.[36] Continuing this line of attack, but with different politics, the AAPSS emerged as an explicitly reformist organization,[37] steered into existence by the professional intellectuals who were later to establish, on one hand, The American Sociological Society(in 1905), the AHA(in 1884), and the American Economic Association (n 1885) and, on the other, several solely reform-oriented organizations.[38] The AAPSS had four committees; education, public health, social economy and jurisprudence. Its self-conscious purpose was to apply the natural laws of man to social control. Once the education, public health and social economics committees had discovered these laws, the jurisprudence department could

formulate them in legal terms and the organization could lobby for their passage.[39] This procedure is, of course, more than reminiscent of the moral philosophy that the membership of the AAPSS had been schooled in.

That membership gradually began to teach social science courses in their respective colleges and universities. Sumner taught the first course at Yale in 1872,[40] Laws at Missouri in 1876, Mayo-Smith at Columbia in 1878, and Sanborn at Cornell in 1885.[41] These early courses were primarily concerned with the problems of race, immigration, divorce, intemperance, labor, education, poverty, and crime.[42] Under the increasingly dominant influence of Spencer, especially at Yale and Missouri, social science developed a synthetic approach to the generalization of contemporary social data.[43] The Yale catalogue of 1888-9 and 1895-6 carried course descriptions from Sumner stating that the "course would be occupied entirely with positive information and scientific method, and would not take up any of the subjects of criticism and speculation popularly connected with 'social science'."[44]

Several other streams combined with those of the social science movement and the Spencerian scientific viewpoint to form the sociology that was evolving in this period. In 1889 Giddings was granted Columbia's first chair of sociology. He was very much influenced by the demographic work of Charles D. Wright and by the French social psychology of the 90's (which, incidentally was closely related to Smith's work on moral "sentiments").[46] Because Columbia's sociology department was one of the first and the largest to develop in this

period, Giddlings' interests entered easily into the mainstream of sociological thought. In the 80's, moral philosophy split into Christian ethics, social ethics, ethics and Christian sociology. In general, the first three of these were taken over by divinity schools and philosophy departments, but Christian sociology was found in sociology departments in the 90's.[47] A. W. Small, who took Chicago's first chair of sociology wrote and taught from this viewpoint and both Ely and Commons explored it in the 90's.[48] Also, in the 90's, most theoretical sociologists concerned themselves with the philosophy of history, though this aspect of the field was later excluded.[49]

In the 1890's, then, with the establishment of the first departments of sociology in major centers of higher education, sociology emerged as the confluence of the reformist thrust of the early social science movement, the synthetic approach taken over by Sumner and Laws from Spencer and Comte, the ethical viewpoint left over from moral philosophy and the demographic and social psychological strains of Giddings' work. These forces, however, were not all of equal weight. In divorcing itself increasingly from philosophical and ethical questions, sociology took up the task of studying social conditions and institutions as they actually were. Sumner's Folkways and Westermarck's History of Human Marriage... both put sociology firmly in this path after 1900. In contrast, Small's work quickly lost favor.[50] The analysis of social problems took place increasingly in terms of functional, as opposed to the past structural descriptions. This development was well supported by the Progressive position that the

government's application of well-reasoned adjustments could solve all social problems.[51]

The period from 1890 to 1910 saw a tremendous general growth in the funding, enrollment, and faculty size of institutions of higher education,[52] partially under the auspices of this same Progressive position. Sociology departments and courses, like those of the other social sciences, kept pace with this expansion. In 1889 there were four institutions offering sociology courses. In 1901 there were 132 institutions with 399 courses. In the next 8 years, the number of institutions teaching courses increased by 155% and the number of courses by 162%.[53] The increased number of courses and resources allowed sociology to fragment itself. Almost as soon as it became a discipline it began to split into topical areas: rural, family, urban, race, etc. The problems of data gathering, seen as basic to the scientificity of the field, were slowly solved through the establishment of government and business bureaus and divisions. Thus, by abandoning the reformist and ethical strands of its origins (to reform organizations and professional schools of social work), sociology went to work with the vast new resources provided, to serve its benefactors by providing the man- and brain-power to make their world turn smoothly.

Anthony Oberschall's contribution to a collection of essays on The Establishment of Empirical Sociology makes an additional, original and essential point about the institutionalization of sociology, as it relates to the present movement to institutionalize interdisciplinary social scientific research. He argues that

> ... the wide resource base and competitive nature of the rapidly expanding higher education system in the United States, together with the sponsorship and active backing of the new discipline by influential and organized groups who perceived sociology in their interest, were crucial factors enabling the institutionalization of sociology in the United States.[54]

But, he adds:

> ... the opportunity provided by sociology was expointed not just by intellectually dissatisfied and socially concerned scholars, but by a group of upwardly mobile men who otherwise could not have moved into university positions through the already established disciplines. Such an opening was therefore seized, and a group of professors with a vested interest in the continuity and differentiation of the new discipline was formed. The multiple starts of sociology at several universities and the sheer quantity of sociologists then made for a high probability that at least some would be successful in this process of intellectual differentiation and innovation...[55]

The conditions Oberschall (and others) describe as the basis for institutionalizing sociology in the United States are very similar, as we will later show, to those existing in America following the Second World War. There is the same tremendous expansion of educational resources, the same panic about "social problems," the same proliferation of reform organizations putting pressure on and getting intellectual support from universities, and the same development of a group of highly qualified social scientists who have no homes in already existing disciplines. It is paradoxical that the establishment and the submersion of this discipline have so much in common.

Anthropology was, throughout the 19th century, a close neighbor to sociology in the kinds of questions it asked. It differed in its data sources and in its institutional experience. Both fields sought

to explain social behavior and institutions: anthropology, of primitive peoples, sociology of contemporary societies. Both were early influenced by slavery and anthropology by the presence of native American peoples and cultures. From the 1830's on, a large literature on the physical anthropology of Negroes began to appear in the South,[56] and later in the century much of the anthropological field work was based on Indian culture (most notably, that of Morgan on the New York Iroquois).[57]

Anthropology had a much harder time becoming an academic discipline than did sociology. Anthropology courses were taught with an especially physical, archeological and linguistic emphasis starting in the mid-1880's at Pennsylvania, Harvard, Clark, Yale, Columbia, and, in the 90's, at Chicago.[58] Almost all of these courses were taught in sociology departments where the influence of Spencer made them quite at home. Anthropology departments were not introduced until after 1900, and then, only slowly.

This is not to say that there wasn't a great deal of anthropological work going on. In this period a tremendous amount of field work was done and systematized so that when anthropology emerged as a discipline, it had a core of factual materials at its base. These materials could be largely credited to the United States Geological Survey. In 1876 it organized an ethnological survey under J. W. Powell to study the archeology of the Indians. This survey became the Bureau of American Ethnology and later expanded its interests to the cultural aspects of the field. A second major force behind the accumulation of anthropological knowledge was the Museum

of Natural History which opened in 1869.[60] Several of its curators (Putnam, Boas, and Wissler) taught anthropology and were responsible for the founding of other museums. Anthropology was long a field and museum subject before it was housed in institutions of higher education.

The experience of history as a discipline was quite different from that of anthropology and sociology. It originated more in the classics than in moral philosophy. The history of Greek and Roman geography, customs and political life was taught as a corollary to their literature. As an independent subject, history arose with the study of modern political institutions and its early existnece is therefore closely related to that of political science.

In the first half of the 19th century history was studied, written, and taught primarily as a form of literature in America. Most of this was done outside of academic institutions by wealthy amateurs. Previously, these historians had written local histories of both the New England and Virginia settlements. In this period histories of the United States as a nation began to emerge.[61] Increasingly, modern history courses began to be taught in the major academic institutions. Harvard was the first to introduce a chair of history in 1839.[62] This chair was given to Jared Sparks. Sparks and his successors at Harvard, Bowen and Torrey, were very much influenced by the work of Francis Lieber of South Carolina College and later Columbia (who was primarily a political scientist) and Thomas R. Dew of William and Mary.[63] These two men believed that modern history should be concerned with "historical interpretation as a guide to social understanding."[64] The explicit denial of this

approach to history, under the influence of the German historian Leopold von Ranke, put history on the map as a separate, increasingly "scientific," academic discipline in the period following the Civil War.

In the 1870's and 80's graduate education in history began with the introduction of the German seminar approach. Henry Adams inaugurated it at Harvard in 1871[65] but the most influential and important of the early graduate seminars in history, in terms of the historians it produced, was begun at John Hopkins by Herbert B. Adams in 1876.[66] John Franklin Jameson, Woodrow Wilson, Frederick Jackson Turner and Charles Andrews all came out of this famous seminar. Other seminars were started by Burgess at Columbia, McMasters at Pennsylvania, and Turner at Wisconsin.[67] It was through these seminars that Ranke's methods of historical scholarship were introduced and spread. These emphasized the objective critical study of reliable sources dealing with primarily political institutions, particularly in their legal and constitutional aspects.[68] The maxim of the Oxford historian, Edward A. Freeman that "history is past politics; politics is present history" hung over the library of the Hopkins Historical Seminary.

In 1884, under the leadership of the above named historians, the AHA was formed.[70] It oversaw the activities of its rapidly expanding profession in these years. Those activities centered primarily around the massing of historical data. The principle behind this was that "The facts must be gathered first; the generalizations will then emerge from their comparison."[71] After 1900, the subject of

historical fact-gathering expanded to include the social, intellectual and cultural institutions of the past. With this, political science claimed full control over the territory it has been sharing with history in the early years of its development.

Courses in law, in the classics, in moral philosophy in political economy and in history together laid the foundations for the field of politcal science. It was only after the Civil War, as law became increasingly professional and the other fields increasingly specialized, that political science entered college curricula primarily with history.[72] In 1880, the first graduate school of political science was created at Columbia by John Burgess.[73] It was the only, lonely one until the 1890's when departments were created at Chicago and Missouri.[74] After the turn of the century, the American Political Science Association was formed (out of a joint meeting of the AHA and the American Economics Association)[75] privately endowed research institutes began to be funded[76] and, finally, departments of political science became widespread.

Like other social scientists in the last quarter of the 19th century, political scientists spent their energies gathering enough information to stake a claim for their own discipline. They began with historical and comparative studies of political parties, administration and colonial government. Also like other social scientists, their interests, by the end of the century, were increasingly tied to those of government. Descriptive surveys, emphasizing the functional as opposed to structural aspects of political life, particularly with regard to foreign relations, began to become quite numerous. More

directly, the field of political science was able to aid government by training political scientists for public employment. Columbia's graduate school set the precedent for this. The College Handbook of 1880, in fact, proclaimed its public contribution: "The purpose of the school is ... the development of all branches of the political sciences [and] the preparation of young men for all the political branches of public service."[77] Under the enormous growth of higher education in the 90's and the first decade of the 20th century, the field of political science was increasingly able to meet this goal, though even in 1914 there were still only 38 departments of political science in the country.[78]

The development of economics in the United States, in contrast to that of political science, began much earlier and proceeded much more rapidly. The services economics could provide were clear. In 1885 a group of young American economists returned from studying in Germany to found the AEA for the purposes of furthering research and publishing economics monographs.[79] Rebelling against the philosophic style of the economics of moral philosophy, these men were interested in developing a statistical, inductive economics of American institutions. Calling on Comte's critique of the abstract nature of political economy, they supported the growth of microscopic studies of economic life: "The most fundamental things in our mind were the ideas of evolution and of relativity ... the old economists held the idea of a body of established truths arrived at chiefly by deduction based upon certain traits of human nature and familiar observation."[80]

Until the 1870's political economy was taught in separate courses within departments of moral philosophy. In 1871 Harvard instituted the first separate chair.[81] Other colleges and universities soon followed suit. The influence of the German school combined with an ever-more-difficult economic situation in the United States to give initially an almost "applied" slant to the field.[82] The problems of taxation, banking, tariffs, immigration, transportation and government regulation of industry all were examined with increasing reference to the specific social (as opposed to political) relations of production (and occasionally distribution). By 1890, the historical treatment of economic issues was fairly well standardized and separated into the field of economic history.[83] Economists then settled down to the nitty-gritty of fact-finding. The establishment of Federal bureaus of social statistics helped them enormously. By the turn of the century, the field was professionalized in schools of business, commerce and finance and thoroughly institutionalized as an academic "science" of accumulation.

Like the fields of history and economics, American psychology was very much influenced by German treatment of this new field. In the last quarter of the 19th century psychology emerged in Germany as the synthesis of two approaches to the human mind: one originating in the field of physiology and concerned with perception, sensation, and nerve-functioning, and the other in the philosophic discussion of the relationship between mind and body..[84]

Wilhelm Wundt, a German scholar trained in physiology and philosophy and considered the first psychologist, argued for an

independent, systematic science of psychology. Wundt's concept of this "science of Experience" parallels quite closely Comte's concept of a "science of Society". He outlined the discipline of psychology as

> (1) the analysis of conscious processes into elements, (2) the determination of the manner of connection of these elements, and (3) the determination of their laws of connection ... The goal of psychology is the analysis of mind into simple qualities and the determination of the form of their ordered multiplicity.[85]

In other words, Wundt believed that psychology should study the structure of consciousness.

In the 1880's almost every American who later participated in the development of the American field, studied with Wundt at his laboratory in Leipzig.[86] But, under the dual influence of William James (with whom several of them also worked) and the constraints of American culture, mediated through Spencer, psychology took on a whole new appearance in the United States. American psychologists were more interested in the active processes of mental activity than in its static structure.[87] They developed a psychology of individual differences in ability to adjust to the environment.

At the University of Chicago in the 90's, under the influence of John Dewey and Frank Angell, this point of view became known as the "functional school".[88] The various aspects of the uses of the mind that the functional school emphasized were developed into several subfields in the period between 1890 and 1910. Chicago pioneered the study of Educational and Animal Psychology;[89] Columbia of intelligence and I.Q. testing under Cattell, Thorndike and Woodward;[90] and Clark, the study of Child and Adolescent Psychology under the dynamic influence

of G. Stanley Hall.[91] James had taught almost all of these men during the 80's at Harvard, where he taught in the philosophy department until in 1889 he was made professor of psychology.[92] These four institutions, in addition to Hopkins in the 80's, housed the first and most important psychology departments in America.[93] By the 90's they were training the psychologists who developed the discipline and laid the basis for the behaviorism of the 20th century.[94]

By 1900, then, sociology, history, psychology, and economics were fairly well-established disciplines in American colleges and universities; anthropology and political science were about to emerge. All of these disciplines were moving in a common direction. They were concerned with the "scientific" statistical generalization of social facts, and with providing professional answers to social problems based on those facts. But, because they followed Comte's outline for social science, all of their solutions were based on one major assumption: that the existence and structure (the phenomenological facts) of capitalist society were an unalterable given. Because the only possible, not to mention necessary, social solutions were piecemeal, the development of the different and segregated approaches of each of these disciplines made perfect sense. It was not until after the second world war that the possibility of an underlying unity of social existence began to be explored. The structure underneath the structure (as Piaget calls it) demanded the examination of interdisciplinary approaches to social problems and sciences. Only Marx and some of his followers, who had never taken the structure of society as given (but rather, as taken) had seen the world as an

infinitely inter-related whole.

At the same time, however, Marx was partially within the tradition of the positivist social scientists who founded the American social disciplines. He too was trying to establish the laws of human society on an empirical basis. He too considered his work scientific. But, Marx's concept of science was very different from that of Comte and his American descendents. Where the positivists' stance was of neutrality, Marx's was of criticism; where the positivists' laws were universal, Marx's were historically specific; where the positivists saw knowledge as the key to alleviating the impact of predetermined laws of nature, Marx saw it as the basis for freedom to determine the direction of those laws;[95] where the positivists saw all social forms as relative to their stage of development, Marx saw them in the light of "autonomous absolute standards of truth" (and judged them by those standards).[96] What all these differences in approach add up to is that Marx's work could never have found a place in any one of the new social science departments (excluding all ideological considerations) though it absorbed the subject matter of all of them.

Marx's notion of social facts and of how categories of thought illuminate those facts, is at the heart of this paradox. To Marx every fact is more than itself. It is the embodiment of its opposite (s) (as production is consumption) and at the same time, conflicts with and negates its opposite(s) (as the private accumulation of capital restricts the social determination of its use). Marx's concept of the fetishism of commodities illustrates how this view of facts leads one away from compartmentalized social science:

> ... the labor of the individual asserts itself as a part of the labor of society only by means of the relations which the act of exchange establishes directly between the products, and indirectly, through them, between the producers. To the latter, therefore, the relations connecting the labor of one individual with that of the rest appear, not as direct social relations between individuals at work, but as what they really are, material relations of persons and social relations of things.[97]

The exchange of commodities embodies the exchange of labor-time and restricts the exchange of commodities on the sole basis of use. Because exchange value is a social relation of production, it is neither purely economic, nor purely sociological, nor purely any one thing. As Marx shows, it is purely historical -- but not in the sense of the academic discipline of history.

The categories with which Marx anal zed the multi-dimensional social facts he studied were historical categories. In conceptualizing the relationships between the phenomena he worked with, he isolated the dominant features that gave them meaning, in contrast to his contemporaries, who gave all factors equal weight, and divided them only in terms of consecutive classifications. Marx criticized the political economists who talked of land, labor, and capital.[98] These insipid categories, he said, each of which could be seen as playing an equal role in all forms of society, precluded the analysis of the relations of capitalist society. Rather than "sinking the particular in the general", as the positivist offspring of moral philosophy attempted to do, Marx "saw the general in the historically unique."[99]

We can see the contrast between these two approaches in the work of John Kenneth Galbraith and the criticism Marx would have aimed at this level of analysis. In discussing "Post-Industrial

Society", Galbraith begins his analysis with the technological imperative. To him all use and problems of machinery are the same, no matter how great the differences in the societies that use it. "Capitalist of Communistic, all states tend to converge in character under the imperatives of technology."[100] Technology is an autonomous force that determines the direction of social development. Marx replies:

> Machinery is no more an economic category than the ox which draws the plough. The application of machinery in the present day is one of the relations of our present economic system, but the way in which machinery is utilized is totally distinct from the machinery itself. Powder is Powder whether used to wound a man or to dress his wounds.[101]

By using a model that abstracts from the historically specific relations of capitalist use of technology, Galbraith precludes the possibility of critically analyzing those relations. The one-dimensional view of society that a historical category produce, leads to an essentially conservative social science.

In addition, the search for universal categories (or, as it is called today, the absolute method) obscures the processes of change. As Marx pointed out, "The most modern period and the most ancient period will have certain categories in common ... [but] it is precisely their divergence from these general and common features which constitutes their development.[102] This view is quite out of keeping with the positivist "philosophy" that was behind the establishment of separate social science disciplines in America. As discussed earlier, that philosophy points to the counting and generalizing of repetitive social "data". All exceptions to "empirical" generalizations are

seen to be, not the basis of growth and development, but examples of unexplainable deviance.

I have used Marx to illustrate what the fragmentation of the social sciences sacrificed in the process of academic establishment and acceptance. It is my belief that the question of the depth in which a social scientist chooses to view the world is, in the final analysis an essentially political one (necessarily though not sufficiently). Marcuse summarizes this point from another angle:

> The dialectical theory of society emphasized the essential potentialities and contradictions within this social whole, thereby stressing what could be done with society, and also exposing the inadequacy of its actual form. Scientific neutrality was incompatible with the nature of the subject-matter and with the directions for human practice derived from an analysis of it. Furthermore, the dialectical social theory could not be a special science among other sciences, because it considered the social relations to embrace and condition all spheres of thought and existence. Society is the negative totality of all given human relations ... and not any part of these. For these reasons, the dialectic was a philosophical and not a sociological method, one in which every single dialectical notion held all of the negative totality and thus conflicted with any cutting off of a special realm of social relations.[103]

In contrast, the compartmentalized view of society accepts it as an amalgam of established, one-dimensional, immutable (though ameliorable) social facts. At the same time, it hides this conservatism behind the cry of neutrality and declares all questions of multi-dimensional possibilities or potentialities beyond the realm of science. In the main, the social science departments of the late 19th century, accepted, and, indeed were themselves a product of this framework.

Recent History of Interdisciplinary Debates and Structures

These autonomous departments provided the dominant resources for social scientific research until after the second world war. In the concluding section of this paper, I will discuss the contempory attempt to work across the boundaries of the individual disciplines, but first, a brief word about the pre-World War II period.

Several exceptional and early attempts to swim against the current of isolation partially laid the basis for the post-war inter-disciplinary undertow. In the early 1930's, Wilson Gee, himself, the director of the University of Virginia's multi-disciplinary Institute for Research in the Social Sciences, did a study of existing research institutes.[104] He describes the social research organizations of eighteen major American colleges and universities and reveals that a large number of them were multi-disciplinary; i.e., they had staffs of people from the various social science departments. Most of their funding, however, came from private foundations, (in contrast to post-war massive government funding)[105] and was consequently inconsistent, unstable and sparse.[106] The research that came out of these centers was done primarily by individuals and primarily within the context of the individual's discipline.[107] With their roots in young and immature academic departments, the early centers aimed modestly at the mere encouragement of social research. It is remarkable that they brought diverse disciplines together, if only under the same budget, considering that disciplines were still trying to define themselves.

Only one of the early centers (of those I have come across), the Yale Institute of Human Relations, went beyond the mere housing of several social sciences, in a sustained attempt to integrate and co-ordinate the research of its membership. The goals of the IHR were twofold: "to promote co-operative research on problems of human welfare and to develop a unified science of individual and social behavior as a foundation for more effective training of physicians, lawyers, ministers, nurses, teachers and research workers."[108] The institute is particularly interesting in that its early attempts to create an integrated science of behavior are almost archetypical of the forms and procedures of many contemporary interdisciplinary ventures. The following description of the Yale IHR is based on a brief history that Mark May, its many-year director, wrote in 1971.[109]

The Institute of Human Relations was organized in 1929 as part of a plan to develop and integrate all teaching and research at Yale.[110] It was a "voluntary association of scientists" all of whom did research in an area related to human behavior and relations. Attempts at co-ordination in the early years took two forms. First, they took the form of teams of various disciplinarians working on a common social problem. Interdisciplinary studies were done on juvenile delinquency, automobile accidents, unemployment, mental health, the administration of justice, residential mobility. Second, they took the form of emphasis on the development of new techniques and the co-ordination of data obtained by several techniques. May says that the solution of specific social problems by "frontal attacks" of teams of investigators using and developing co-ordinated techniques failed in almost

every instance because this procedure "follows rather than precedes the development of scientific theory. It is [he says] no doubt a useful procedure and often a necessary one, but mainly after a field has been cultivated to a point where the problems requiring a multi-science approach are clearly defined."[111] Five years after its inception, the IHR began to explore the possibilities of a theoretical basis for correlation of the knowledge its researches were discovering and generating.

The staff and leadership of the Institute brought together four basic fields in developing a theory of behavior. Clark Hull's work on learning which defines conditioning as "an automatic trial and error mechanism which mediates, blindly but beautifully, the adjustment of the organism to a complex environment," served as a catalyst for three of the institutes' major interests. The psychoanalytic bent in the work of John Dollard and Edward Sapir, the conception of social structure in the work of Sumner and Keller (who was represented in the Institute by his student, G. P. Murdock) and further developed by Loyd Warner, and the study of culture and its impact on personality and behavior in the work of Sapir and Clark Wissler. In 1935-6, Hull, Dollard, Zinn (a psychoanalyst) and others undertook a systematic exploration of psychoanalytic theory from the standpoint of learning theory. Previously, Hull had given a seminar on learning theory. Another series of seminars in the mid-thirties, each one year in duration, explored the fields of learning and behavior theory, psychoanalysis and psychiatry, and social structure and culture. "The main concepts, principles, methods, and illustrative

data of each were presented informally, and discussed critically. Particular attention was paid to points of overlap among the three fields."[112] Thus, through rigorous mutual education and criticism, the staff at the Institute began to build on each other's work and together developed a unified theory of the relationship between learning, culture and personality in human behavior. That theory then provided a basis and a direction for future IHR empirical and methodological work. "After numerous points of contact had been established, and areas of common ground discovered, the number of problems of mutual interest multiplied rapidly."[113]

Parodoxically, the Yale Institute of Human Relations was squeezed out through administrative conflict with the University in the early 1950's,[114] just when interdisciplinarity was becoming the vogue. As we will see, the later institutes have much in common with the Institute of Human Relations but, unfortunately, more with its blind alleys than with its successes.

The Second World War marks a turning point in the disciplinary organization of social research. We will approach the developments in this most recent period from two angles. First, that of the chronological development of different kinds of extra-disciplinary research centers, and second, that of the continuous debate and discussion of their role and importance (or lack of importance) in the development of social research.

Very little has been written about the historical growth of interdisciplinary research. What we have been able to come up with is primarily gleaned from a series of reference catalogues called Research Centers Directory.[115] This series catalogues research

organizations by subject and gives a brief, general description of their purposes and administrative organizations. What follows is a summary impression of the chronological development of the various kinds of post-war interdisciplinary centers. A more precise study of the Research Centers Directory might give us a larger crop of early forms of certain centers, but the trends of development are, I believe, fairly accurate.

The first, most pervasive and most heavily funded of the waves of new extra-disciplinary centers was in the field of international relations and studies. These centers took two forms. The first and, at that time, less prevalent, studied one country or region of the world from the perspective of various disciplines. Part of the reasoning behind the establishment of the regional kind of research institute was that so little knowledge about these areas existed, that experts really needed to be filled in on the basics of their field's findings.[116] The Harvard Russian Institute is perhaps one of the most successful examples of this kind of center.[117] The second form of international studies centers stressed comparative research either by one discipline on two or more regions (as in comparative political systems centers) or by various disciplinarians on one problem in more than one area. This second kind of center tended to be less interdisciplinary than the first, though the extent of cross-disciplinary integration in either has not been very extensive.

A descriptive and evaluative review of area and language studies, sponsored by the Social Science Research council was recently published.[118] It discusses the degree of interdisciplinary integration in 203 graduate level programs in two ways. First, in terms of the staffs' self-identity in research and teaching, with the area -- a score of 7 -- or with a

single discipline without reference to the area -- a score of 0.[119] Respondents were also asked to indicate "whether they thought that their colleagues viewed their area-related activities as (5) highly prized, (4) normal and necessary, (3) exotic and tangential, or (2) a dispensable luxury." The following table summarizes the not very positive results.[120]

AREA/DISCIPLINE IDENTIFICATION AND RESPONDENTS' JUDGEMENT OF COLLEAGUES FAVORABLENESS[121]

	TEACHING		RESEARCH		COLLEAGUES' FAVORABLENESS	
	Mean	Rank	Mean	Rank	Mean	Rank
History	4.53	1	5.19	1	3.87	1
Political Science	3.81	2	4.83	2	3.70	2
Anthropology	3.44	3	4.78	3	3.53	3
Economics	2.74	4	4.45	4	3.28	4
Sociology	2.87	5	4.43	5	3.52	5
Psychology	1.94	6	3.72	6	3.14	6

Secondly, the SSRC report discusses interdisciplinarity in terms of the integration of disciplines in the training of graduate students. Though programs have a large spread of disciplines represented in their courses and faculty, study of students' rarely avail themselves of courses outside their own disciplines and that when they do, the burden of integration is on them.[122] In addition, interdisciplinary courses are extremely sparse.[123] Richard Lambert, who wrote this report, asks the very apt question, "How does this happen to an educational innovation, one of whose primary rationales is to provide a bridging of the disciplines, a route of escape for students from the increasingly tight restrictions of disciplinary boundaries?"[124] He answers that "... most programs are really loose constellations of faculty members moving their own graduate students along within disciplinary pathways to a competence in the area within their disciplines. Perhaps one or two related courses will be taken in another discipline and some language training, but that is all."[125] These problems in area studies centers of overbearing departmental loyalties unfortunately crop up, as we will see, in most other kinds of interdisciplinary institutes.

Another kind of interdisciplinary institute that sprouted after the second world war, was in the field of human relations, specifically in industry. In his book about American industry's use of social scientific research, (The Servants of Power), Loren Baritz outlines the important aspects of human relations:

> This field ... was, as the name suggests, interdisciplinary; borrowing from both psychology and sociology, human-relations experts freqently were also trained in anthropology and other related fields. In industrial terms these experts made use of the psychology of the 1920's and the sociology

> of the Hawthorne experiments. The new element was their focus, as they put it, not on the isolated individual or on the dehumanized milieu but on the interrelationships between the individual and his several environments. Believing it was possible to isolate the internal and external pressures on the individual which would explain his conduct and thought, the human-relations experts concerned themselves with motivation and with small groups in their search for clues to the enigmas of human behavior. Interested also in the processes of human relationships, they studied such phenomena as leadership and communication. Making use of relatively new techniques such as role-playing and sociometry, the human-relations specialists carved out for themselves what they believed was a distinct professional domain...[126]

Though human relations had roots in the 1920's and 30's "industrial relations" work, it became widespread as an explicit attempt to combine the industrial work of psychology and sociology during the late 40's and 50's. But, from the perspective of each of these disciplines, substantive interdisciplinary integration (along the lines of the Yale Human Relations Institute) never really took place. The results of human relations research had its limitations. In sociology, Baritz says, there was a general belief that the "chief impetus to the field of industrial sociology came from observational studies in industry rather than inference from theoretical principles"[127] and this belief discouraged a concentrated effort to tie together the many dissociated studies with some kind of underlying theory. Data were piled on data; statistical analyses were pursued with increasing vigor. And, as the industrial psychologist Kornhauser developed the criticism in 1947,

> The human problems of industry and economic relationships lie at the very heart of the revolutionary upheavals of our century. One might expect industrial psychologists to be fired by the challenge of these issues. But most of us go on constructing aptitude tests instead -- and determining which of two advertising slogans "will sell more of our company's beauty cream."[128]

In the late 1950's and early 60's the new passwords for interdisciplinary innovation were urban studies and public affairs and administration. They were later joined by environmental studies and in the instructional field by black studies and women's studies. Every "new" or current social problem seemed to spawn a research institute with a staff from relevant departments. In 1969, the National Academy of Science and the Social Science Research Council published the results of a large-scale survey of the then-present state of the behavioral and social sciences, in view of their potentials for growth. According to this report, 3/4 of the social scientists working in university research institutes and 4/5 of research funding were in institutes that housed, in whatever capacity, more than one discipline.[129] By 1969, then, American social scientific research was most commonly organized outside, and in some cases, beyond the single discipline's approach to the study of social life. We turn now to some of the main features of this newly predominant form of research organization.

In the concluding section of the paper, we would like to explore the literature and debate on interdisciplinary research. Our discussion, and the way in which it is organized, is based primarily on the reports of three conferences on interdisciplinarity. One came out of a symposium on "Problems of Interdisciplinary Relationships in the Social Sciences" that was organized by the Penn State Psycho-Social Studies Program in 1967. The symposium was part of this then-new programs's attempt to build a self-image for itself as an interdisciplinary program.[130] A second source of our discussion is a session of a 1969 meeting of the Council of Graduate Schools on "Inter-and Trans-disciplinary Programs."[131] The Council of Graduate Schools is an organization of graduate school

administrators who attempt to pool their knowledge of the ins and out, ups and downs, of graduate education and research. Our third source is a report on a seminar on "Interdisciplinarity in Universities" [132] that was called in 1970 by the Center for Educational Research and Innovation. The CERI is an educational branch of the Organization for Economic Co-operation and Development (OECD), which has 23 member countries. Its purpose is to support and promote co-operation in educational research among the member countries of the OECD. These three conferences, one from an interdisciplinary department, one from an administrative organization and one from an international center for education research, reflect the concern among educators with the structure and problems of extra-disciplinary research and teaching in universities.

Our discussion, which mirrors the preoccupations of these conferences, will have three general foci. First, we will talk about the different kinds of extra-disciplinarity; the definitions that various commentors offer and the expression of those definitions in diverse kinds of extra-disciplinary research organization. Next, we will discuss the difficulties these organizations have encountered, both intellectually and administratively. Finally, we will describe one or two institutes to illustrate their structural organization and to analyze the sources of successes, as well as their failures.

One section of the OECD/CERI conference analyzed a questionnaire on interdisciplinarity that had been answered by 132 respondents in 72 colleges and universities around the world. After describing the many and diverse responses to the question of the origins of inter-disciplinarity, Guy Berger (Maitre Assistant, Departement des Sciences

de l'Education, University of Paris VIII) concludes that:

> ... we are induced to doubt the entire approach to the problems of interdisciplinarity. There are practically no experiments which have been conducted on interdisciplinarity alone, whereas there are existing experiments dealing with the needs of science, individuals, society, and of the university, all of which end up rather quickly encountering the issue of interdisciplinarity. For interdisciplinarity is the lowest common denominator of innovation, without necessarily being its starting point.[133]

What Berger is saying is that there are so many different kinds of interdisciplinary centers, and so many ways in which disciplines are combined, that we should consider the possibility that interdisciplinarity is nothing more than those centers' lowest common denominator.

In diverse forms and from various angles, the literature of interdisciplinarity attempts to evaluate the truth of Berger's statement. It asks the questions: What is interdisciplinarity? What is a discipline? Is there any such thing as a pure unidiscipline? Are there assumptions or frames of reference that are specific to each discipline? Are those assumptions contradictory and if they are, how do we deal with contradictory explanations of a single social phenomena? Is there a way in which disciplinary styles and explanatory models can complement each other and how can those complements be found? Is there any quality that all forms of interdisciplinarity have in common? What are the differences in those forms? Why have people been so interested in overcoming their disciplines? Have they been successful? What does it mean to be successful and what are we really trying to do? We do not in any way mean to imply that we, or the people we discuss have the answers to these questions. We can only explore how several groups of experts have begun to discuss the questions, talk about

our own and their inclinations, and raise more questions.

Interdisciplinarity has been discussed in two predominant ways. The first sees it as the sharing of technology, methodology and concepts by permanently established fields, for the purpose of expanding the quantity and quality of empirical data.[134] The second sees it as the broadening of old disciplines and the creation of new ones through total absorption of previously external explanatory models. The first sees interdisciplinarity almost as a matter of luck, in that one discipline's use of another's findings or procedures is seen as an imposition of beneficial though not necessary externalities. The second sees interdisciplinarity as a necessity, arising out of the internal development of certain disciplines.

Neil Smelser has this to say about the nature of disciplinary maturity and boundaries in the study of people and the world they inhabit:

> The presence of numerous 'schools' in a discipline generally betokens a relative scientific immaturity... As it achieves scientific maturity, it more nearly attains consensus on the scientific problems to be posed, the relevant independent variables, a theoretical and philosophical perspective, and appropriate research methods. Simultaneously, it witnesses a decline of distinctive schools; a decline in the quantity of polemic about the 'nature' of the field and the value of different 'approaches' to the field; a decline in propaganda, proselytization, and defensiveness; and an increase in discussion of findings in relation to accepted criteria of validation. The existing disciplines may be ordered according to the degree to which they currently manifest these several concomitants of this aspect of scientific maturity. At one extreme are mathematics and physics, and at the other are humanistic disciplines such as literary and art criticism.[135] The social sciences occupy an intermediate position...

This conception of disciplinary study implies a world that is standing still. If we assume that the purpose of science is at least to understand the world, then the scientific and "humanistic" categories, the "accepted criteria of validation" which we bring to bear on the questions and data we work with, can only be "mature" (fixed) when the world becomes fixed. Or, in other words, "The organization of science reflects man's understanding of the organization of nature.[136] Fortunately, science has shown that the world not only turns, but turns within a system.

Smelser's ideas are one aspect of the argument that is taking place in the sciences today over the nature of disciplines and of disciplinary study. In contrast stands the formulation presented by Piaget.[137] He says that the internal development of both the natural and the social sciences has revealed the necessity of shaking up the established disciplines and reorganizing them "by means of exchanges which are in fact constructive re-combinations."[138] He argues that mathematical and experimental techniques have led to the discovery of fundamental structures. These structures are sets of necessary connections, as opposed to laws which are simply noted as factual data. They are systems, beyond the boundaries of phenomena, of "transmissions which are the sole basis of causality but cannot be noted by themselves."[139]

Ironically, Piaget demonstrates his thesis with one of the fields that Smelser considers most "mature," i.e., unchanging and unconcerned with its own "nature:"

> ... the elements studied by chemistry easily lend themselves to arithmetic enumeration and geometric description and obey the laws of physics, but they also have a number of specifically chemical characteristics (affinity, valence) which are considered irreducable to the former. The same applies to biology in relation to chemistry, or sociology in relation to biology. Any interdisciplinary research is therefore excluded in advance, for its very principle is contrary to that of natural boundaries separating the various categories of observables from each other. Nevertheless, modern theories based on electronic models of ionic valences or co-valences show well enough how subjective the boundaries between chemistry and physics are and how the search for causal explanations is essential to scientific activity and at the same time provides a source of interdisciplinary connections ...We are compelled to look for interactions and common mechanisms. Interdisciplinarity becomes the pre-requisite of progress in research, instead of being a luxury or bargain article. The comparatively recent popularity of attempts at interdisciplinarity therefore does not seem to be due to quirks of fashion or (or not only) to social constraints imposing increasingly complex problems. It seems to result from an internal evolution of science under the dual influence of the need for explanation, and therefore the attempt to supplement mere laws by causal "models" ...[140]

These are the two opposing themes that dominate recent discussions of extra-disciplinary study in the sciences (here with particular regard to the social sciences). The first, as presented by any number of social scientists, here represented by Smelser, assumes present boundaries fixed, and calls for exchanges of methods and concepts in the attempt to accumulate the greatest possible amount of data: "The institutional goal of science is the extension of empirical knowledge."[141] The second, as articulated by Piaget, calls for the complete reshaping of knowledge "by means of exchanges which are in fact, constructive re-combinations." Each of these views is the culmination of lines of thinking and studying that can be traced back to the emergence of social science from moral philosophy which was taking place throughout

the nineteenth century. Two aspects of that emergence have been discussed here: the development of positivist departmentalized social science and the dialectical alternative posed by Marx. We will now discuss how both the varying definitions of interdisciplinarity and the varying ways in which it is institutionalized, reflect the distinctions of these two points of view.

People who write about interdisciplinarity use different words for the same concepts. Here I will try to simplify the rather verbose discussion of definitions.[142] There seem to be three important and prevalent kinds of extra-disciplinary social scientific research. The first, about which there is the most general consensus on terms, we will call multidisciplinarity. It signifies the mere juxtaposition of more than one discipline, intellectually, as the addition without integration of knowledge, and institutionally, as the presence of varying disciplines within a research institute. Heinz Heckhausen, a German psychologist and participant in the OCED conference, calls this "Composite Interdisciplinarity". He uses the example of city planning to describe it.

> City planning ... asks the questions of sciences as diverse as engineering, architecture, economics, biology, psychology and others. In a strict sense, even the respective material fields of these disciplines do not overlap, let alone the related subject matters and levels of theoretical integration. What keeps such a strange assembly of disciplines together, however, is a jigsaw puzzle-like composition of adjacent material fields within the complex compound which the realityoof city life is. The interdependencies of multifarious conditions in the diverse material fields have to be explored for their influence on important issues of urban life like health, economic welfare, graceful living, opportunities for child development and other goals set by human values transcending all science.[143]

It may be overly generous to attribute the explorations of the "interdependencies of multifarious conditions in diverse material fields" to multidisciplinary centers, but this is certainly the general idea behind bringing the disciplines together in them.

The second kind of extra-disciplinary center we will call inter-disciplinary, though sometimes what we are here describing is called cross-disciplinarity. It signifies, as Smelser and any number of other social scientists project and recommend, the use by one discipline of the analytical tools of another. Here one discipline is dominant, but is assisted by others. There is a one-way movement from donor to recipient. The application of game theory to economic behavior or the statistical analysis of historical censuses are examples of interdisciplinarity. Institutionally, most problem-oriented research institutes are interdisciplinary in the sense that the presence in them of diverse disciplinarians is for the purpose of bringing together as many relevant methods and points of view as possible.

The third predominant classification of extra-disciplinary research is trans-disciplinarity. It signifies the creation of new fields in the boundaries of the old, through the search for and arrival at causal explanations. Psycholinguistics is the most striking social scientific example of trans-disciplinarity. Here, research on the role of intelligence in the development of language has helped to explain the structure of both reason (previously only studied in psychology) and grammar (previously only a subject for linguistics), and has revealed that they are necessarily related. There is a two-way exchange in which the findings on psychology and of linguistics have changed both fields mutually.[144]

These three definitions summarize the discussion of the different ways in which the social sciences can be combined. It is, of course, evident that they are sequential levels of the same process (as Eric Jantsch points out in his more elaborate scheme in the OECD report):[145] One would not find the second without the first, the third, without the first and second. Consequently, in practice the first two are much more common than the third, by virtue of simple laws of development, and, partially, as I hope to show, by virtue of the historical purposes of positivist social science.

Now that we have glimpsed the general classification scheme of extra-disciplinary research organizations the distinctions among them can be further explored by looking into what kinds of problems they grew out of, what their original goals were, and how these were reflected in their various structural arrangements.

Multidisciplinary research centers typically originate in an attempt to share scarce resources. Speaking to the Council of Graduate Schools on the "role and structure of interdisciplinary research centers, Daniel Alpert, Dean of ---------- at the University of Illinois, outlines their general structural form.[146] Multidisciplinary centers are primarily service organizations for selected departments. The work done in them remains within the context of the single discipline, except for the chance encounters of proximity. Graduate students generally work with one professor in the same way that they function in departments (as in the international studies programs discussed earlier). Multidisciplinary centers are commonly administered by representative inter-departmental committees, headed by a center director. The director is responsible for co-ordination and assurance that clients are adequately

served. Co-ordination here means primarily the distribution and apportionment of resources. Though many multidisciplinary centers may deal with a specific common problem or region, their orientation is descriptive and additive. The urban planning centers described by Heckhausen are a good example of this. These centers are accumulating knowledge that will ostensibly serve as a basis for inter- and perhaps trans-disciplinary integration later on. There is one other source of the multidisciplinary center, and that is the search for funds. Often they are a nominal multidisciplinary conglomeration of individual disciplinarians with a catchy phrase and a common need for funding.[147]

Interdisciplinary research has diverse origins and purposes. Three necessary conditions for interdisciplinary research have grown continuously and simultaneously since the second world war. One is the development of analytical tools that can be used by a variety of disciplines.[148] For the most part, this "new intellectual technology" is related to the computer and includes game theory, decision theory, simulation, linear programming, cybernetics and operations research.[149] Another is the possibility interdisciplinary institutes offer for innovations that tradition-bound departments may shy away from.[150] For instance, team research is much more acceptable within an interdisciplinary research institute than it is within a department. A third is the relative availability of the large scale funding necessary for the initiation of these institutes, because they tend to be the largest, most expensive forms of organized research.[151]

Each of the above spurs to interdisciplinary research deal primarily with <u>how</u> it is organized. Technology and funding and innovativeness allow for interdisciplinary research. But --- what makes

it happen? Why do these developments add up to interdisciplinarity? We have come across two answers.

The first is given by Caroline Sherif and Muzafer Sherif in the published report of the Penn State Psychosocial Studies symposium on interdisciplinarity.[152] They argue, essentially, that interdisciplinary centers are necessary for the verification of the findings of each of the individual social sciences. Because the social sciences often study a common subject at a different level of analysis, they can validate, or invalidate, each other's research. "Within the confines of the single academic discipline," the Sherifs argue:

> It is possible to avoid the validity criterion like the plague. As long as we have to deal only with our colleagues we talk instead of reliability of measurement and representativeness of sampling techniques. We refine our tools and techniques for these purposes until we are in the gravest danger of being reliably and representatively wrong.[153]

Interdisciplinarity militates against this danger. They illustrate how with an example from their own field of social psychology and in terms of the definition of the "stimulus situation" in that field. To paraphase: In early experimental psychology, stimulus was conceived as a discrete item or dimension of the physical environment. Later, it became evident that "the significance of a particular stimulus" depended on its relationship "to other items surrounding it as well as to the relevant past experience of the organism ... Even that creature sacred for many years in the psychological laboratory -- the rat -- was shown to perform differently in the same maze depending upon its location in the room relative to windows."[154] The effect of the "isolated stimulus" point of view on early social psychology, was that

the stimulus situation was taken for granted and assumed. Thus, when Muzafer Sherif, who had had experience in Turkish culture, studied social psychology at Harvard in the early 1930's, he was dismayed by the generalizations this social psychology was making about family life, competition and other kinds of social situations. Those generalizations were based on questionable sociological, anthropological and historical assumptions. Consequently, he went searching into these fields to find the source of the disparity between his own and American social psychology's experience of the stimulus situation. The social psychologist, he says:

> has to be concerned with social stimuli in terms of their patterned properties and form, even if he is a good psychologist and nothing else. And this necessity brings him to those social sciences whose problems have concerned the regularities of patterned actions, events and objects in social life. It leads him to the social sciences that have studied the development stabilization and change of such regularities. In short, he becomes dependent upon sociology, anthropology, political science or history, as the case may be. He becomes dependent upon their findings in order that he may properly specify the past history of the individual's social stimulation and the properties of situations and events that he faces in an immediate occasion.[155]

The argument of the Sherifs makes a lot of sense. What they are prescribing is very similar, in form, to the attempts of the Yale Human Relations Institute, which we discussed earlier. It would be very interesting to see how many and what kinds of recent interdisciplinary institutes function along these lines. Our impression is that very few do.

The second major reason advanced for the necessity of interdisciplinarity comes from the area of problem-oriented research. That

reasoning, here put forward by a policy researcher, goes as follows:

> ... policy problems do not come in neat, discipline-defined packages, but rather require the simultaneous consideration of issues that traditionally have been regarded as the province of several social science disciplines. Therefore, it seems likely that training social scientists to do policy-relevant work requires a much higher level of disciplinary pluralism than has been traditional.[156]

Problem-oriented research usually sees its "problem"(subject) as too complex, or too important to be handled by any single discipline. Because the problem-oriented institute is a prototype of the inter-disciplinary center and seems to be its most prevalent form, we will use it to demonstrate both how interdisciplinary centers are organized and what kinds of difficulties they encounter.

As outlined above, most interdisciplinary problem-oriented research centers are organized to facilitate communication and mutual assistance between disciplinarians. To varying degrees, participants teach each other relevant aspects of their disciplines and methodologies. These participants are generally attached to both a department and the research center.[157] Their tenure and status are determined primarily by the department, even when a major portion of their time belongs to the institute. The inter-disciplinary center is usually administered by a director and a multidisciplinary board of directors. Their main task is leadership in the successful assimilation of varying viewpoints in the solution of a given problem.[158] This is quite different from the co-ordinating role of the multidisciplinary center's administration.

Multidisciplinary Problem-Oriented Research Institutes

Problem related research institutes reflect the difficulties of many inter- and multidisciplinary centers. As a matter of fact, the general estimation of the success of these centers seems to be quite low.[159] The problems are numerous and complex. They are often manifested in administrative forms.

The most common difficulty is the relationship of the institutes to the academic department. Even the initial creation of extra-disciplinary research institutes is limited by the existence of the department.[160] Because they are the prime budgetary unit, initiative for new programs is usually rooted in departments which naturally are more interested in creating programs and gaining facilities that they can control alone, than they are in sharing the wealth. The department's dominant role in funding keeps the interdisciplinary institute on financial tenterhooks and makes necessary the devotion of large amounts of staff time to report and proposal writing.[161] In addition, as already mentioned, the department has quite a pull, both administratively and intellectually, on the staff it shares with the institute. Though a researcher may become especially interested in exploring the relationship between his and another field, he is usually dependent on his own discipline, with its established standards and goals for professional recognition and tenure.[162] Or, he may feel constrained from making an interdisciplinary research commitment for fear of losing touch with his own discipline. In this connection, it is interesting to note that the development of the field of sociology in the late 19th century in England and in France by exactly such constraints.[163] The people who developed the discipline were restricted

by their commitments to either the social institution (for example the statisticians' role in government) or the already established disciplines that they came out of. Maybe someday someone will write a history of the new disciplines that may come out of interdisciplinary research and will mention with awe that there could have ever been a time when its creators were torn between the new field and their past commitments.

One crucial corollary to the problem of the relationship between the department and the interdisciplinary institute is that of finding leadership with a genuine openness and commitment to the exploration of interdisciplinary possibilities.[164] At a weekly seminar of one such institute, in which participants supposedly came together to learn each other's frames of reference, a graduate student once put a sign on the door that said "Sociology 102". That institute is directed by a sociologist and, as the sign implies, spends much more of its meeting time on sociological than on other social scientific topics.[165] This is a problem of being victimized by one's head set. In commenting on a similar situation at the Yale Institute of Human Relations, in the 30's, Mark May remarked that older members were "too old and too well-established in their fields to be expected to change their interests and habits of work. The institute ... therefore looked to its younger men for the development of an integrated program... The integration that was later achieved was developed mainly by younger men, most of whom were of junior rank."[166] Because the membership of any interdisciplinary institute is naturally committed to the framework of an individual discipline, it is essential that a strong leadership be present to crack open and question those commitments.

It would be interesting to look further into how interdisciplinary centers would evaluate the importance of their own leadership to the quality of interdisciplinarity within their centers. It is our impression that the lack of such a leadership has been an important factor in the failure of many an interdisciplinary attempt.

The opposite problem to that of leadership with strong disciplinary loyalties seems to have equally destructive effects. That is to say, a leadership with no disciplinary commitments lacks "discipline" and is doomed to dilettantism. In a speech to the Columbia University Seminar on General Education on "History as an Interdisciplinary Discipline," the historian Peter Gay argues the benefits of "discipline": "The first value of a discipline... is that it provides discipline... by offering a recognized set of ideals, embodied in a known body of literature... by posing an organized set of demands: standards of scholarship, candid criticism and linguistic skills."[167] Eleanor Barbar, who works on international studies programs at the Ford Foundation, carries this point of view into a criticism of much of the current interdisciplinary research.[168] She argues that many interdisciplinary problem-oriented research programs are the product of the layman's analysis of social problems. They deal with those problems primarily in terms of their most concrete symptoms. Rather than exhausting the possibilities of the individual discipline and then approaching other disciplines with clear and sharp questions, these centers look "sideways" for fast and easy answers and results.

A policy-researcher's criticism of academic social science illustrates Dr. Barbar's point precisely. He says that:

> ... academic social science seeks to understand society, not to intervene in it... This is not a criticism of academic social science, for understanding is a prerequisite to intervening...[169]

Nevertheless, he goes on, social science is not directly useful because its detachment leads to the generation of non-action oriented theories for the following reasons: It only identifies broad impersonal causative forces which policy can't deal with, and policy makers need more specific details of social processes than the high level of generality and abstraction that social science presents.[170] Interdisciplinary institutes' attempts to get away from these "limitations" of academic social science are responsible for what Dr. Barbar calls their reification of the layman's analysis. Or, to quote a graduate student in an interdisciplinary social welfare program,

> For the sake of being relevant, the people in my program treat all problems and their historical contexts in a purely descriptive manner. They think describing a situation is understanding it. But, in my opinion, a merely descriptive analysis mystifies the problem in that it assumes that the solution is inherent in the description, and ignores the underlying forces that rigorous and open analysis reveals.[171]

It is exactly the solutions that descriptive social science implies, with their false promises of immediate and painless results, that government funding agencies, especially throughout and since the 1960's, have been pressing for.[172] This is the legacy of positivist, ameliorative social science and its worship of the empirically descriptive. Most interdisciplinary institutes accept this inheritance and, in my opinion, this is the underlying source of their failures.

To see how both kinds of problems, those that arise from over- and from under-commitment to a single discipline, are manifested in concrete form, let us look at the Wisconsin Insititue for Research on Poverty. It is primarily a multidisciplinary institute with inter-disciplinary aspirations that was founded and funded in 1966 by the Office of Economic Opportunity and the University of Wisconsin.[173] It was established for the purpose of doing "research into the nature causes and cures of poverty in the United States" in response to the 1960's "widespread perception of poverty as a national disgrace coupled with renewed confidence in the nation's ability to eliminate poverty through government intervention." The staff of the Institute has been composed of differing numbers of representatives from the various social science disciplines at different times. Almost all of that staff have joint departmental appointments. Each carries out research on a poverty-related theme and communicates his/her findings to the rest of the staff and graduate students at regular seminars. It seems, however, that the Institute has been dominated by economists, in number and in the sources of its "best" work. Its attempts at interdisciplinarity have been judged quite unsuccessful, except in one explicit case: its negative income tax experiment.

> What seem to be the effects of interaction across disciplines? The economists at the Institute attest that they have learned something from the noneconomists, the noneconomists from the economists. This undoubtedly is so. However, with the exception of negative income tax work, it is hard to find much evidence that interaction has affected anyone's research. Economists continue to look at the economic variables, sociologist at sociological variables, and both continue to work within the conceptual frames of their own disciplines. While there have been instances where social scientists have undertaken interdisciplinary research that transcends the individual discipline to look at its own piece of a problem and then somehow interlock the pieces, examples of success stories are hard to find... The negative

> income tax case is as close to being "interdisciplinary" as anything the Institute has done. The hypotheses and questions to be probed have been developed by a multi-disciplinary group dominated by economists. It is difficult to determine whether what has happened thus far transcends the simple addition of sociological questions to economic questions.[174]

It is not surprising that the most successful interdisciplinary attempt is the negative income tax experiment. This experiment obviously assumes (tautologically) that the cause of poverty is lack of money. In terms of description, as the social welfare graduate student above pointed out, it is not difficult for disciplines to add to each other's observations -- which is what the above quote says is the level of the negative income tax project's analysis. Nor is it surprising, given the fact that the institute is grounded on the assumption that government intervention can solve poverty, that the negative income tax is the major solution that it comes up with.

It seems to me that there are two related failures here. One is the prostitution of social research to the established boundaries of vested interest. The other is a failure to develop an integrated theoretical analysis of the causes of poverty. Not only is the fate of the poor put in the hands of the more dominant economists, but it is put in the hands of economists with an obvious commitment to solution of only the symptoms of poverty.

Where does this all leave the possibility for interdisciplinary research? Perhaps the only real and, at this point, successful alternative is in creation of new transdisciplinary forms of research. One really has to know the fields themselves to describe that and since I don't, we will have to base our comments on the earlier summary

of Piaget's abstract description of them.

Piaget says that transdisciplinary comes out of the revelation of the necessary relations of phenomena. Those relations are not apparent in the phenomena themselves, but only in their underlying structures. His transdisciplinary fields would never meet the criticism (of Dr. Barbar) that they sidestep the possibilities of the already established disciplines because they emerge precisely through the exhaustion of the discipline's explanatory models. Transdisciplinary forms would also not be prey to criticism of overcommitment to a discipline because they are built on knowledge recognition of the discipline's limitations.

Most importantly, transdisciplinarity comes out of a search for causal relations -- not just causal relations that imply policy reforms, but causes that explain the underlying processes of social life and organization. It is in this sense that Piaget's formulation parallels Marx's. Both understand that social facts are expressions of other, sometimes hidden, sometimes contradictory social facts. Perhaps transdisciplinary research in the social sciences is as sparse as it is, not only because the social disciplines are so young, but because neither academic nor policy-oriented social scientists care to live with the implications or the responsibilities of truly analytical research. This is not new in social scientific research. What we need now is a commitment to making it dead history. Unless social science breaks away from the descriptive tradition of its ameliorative past, transdisciplinary analyses of society will never be honestly explored.

FOOTNOTES

1. Peter Gay, The Enlightenment: The Rise of Modern Paganism, Random House, 1966.

2. ibid, p. 37

3. ibid, p. 140

4. ibid, p. 144

5. ibid, p. 148

6. Gladys Bryson, "The Emergence of the Social Sciences from Moral Philosophy", International Journal of Ethics, XLII, April 1932, p. 304.

7. Gladys Bryson, "The Comparable Interests of the Old Moral Philosophy and the Modern Social Sciences", Social Forces, XI, October 1932, p. 19

8. Bryson, op. cit., p. 304

9. Gladys Bryson, Man and Society, Princeton University Press, Princeton, NJ, 1945.

10. Quoted in Bryson, ibid., p. 16

11. ibid, p. 27

12. Robert Heilbroner, The Worldly Philosophers, Simon and Shuster, N.Y., 1972, p. 45.

13. ibid, p. 57

14. ibid, p. 51

15. Adam Smith, The Wealth of Nations, Modern Library, NY, 1937, p. 626.

16. Smith, quoted in Joseph F. Flubacher, The Concept of Ethics in the History of Economics, Vantage Press, NY, 1957, p. 90.

17. Heilbroner, op. cit., p. 70

18. ibid, p. 70

19. Marcuse, Reason and Revolution, Beacon Press, Boston, 1960, p. 344.

20. Gordon Allport, "The Historical Background of Modern Social Psychology", in Handbook of Social Psychology, p. 19, Addison-Wesley Publishing Co., Cambridge, Massachusetts., 1954.

21. Herbert Marcuse, op. cit., Reason and Revolution, p. 340.

22. From Cours de Philosophie Positive, quoted in Raymond Maron, Main Currents in Sociological Thought, p. 128, Doubleday and Co., Garden City, NY, 1968.

23. From System de Politique Positive, quoted in Aron, p. 143.

24. ibid, Aron, p. 75

25. Ben B. Seligman, "The Impact of Positivism on Economic Thought", History of Political Economy, Vol. I, 1969, p. 258.

26. op. cit., Aron, p. 80

27. op. cit., Marcuse, p. 348-9

28. L. L. Bernard, "The Social Sciences as Disciplines: The United States", in 1930 edition of Encyclopedia of the Social Sciences, p. 333, MacMillan Co., NY.

29. Anna Haddow, Political Science in American Colleges and Universities, 1636-1900, 1939, Appleton-Century Press, NY and London, p. 100.

30. ibid, p. 171

31. ibid, p. 190, 193

32. Harriman, Roycek, Huszar, Contemporary Social Science, Vol. I, p. 307.

33. Edwin Boring, The History of Experiment Psychology, Appleton-Century-Crofts, 2nd ed., 1950.

34. Table 1

35. L. L. and Jesse Barnard, The Origins of American Sociology, Thomas Y. Crowell and Co., NY, 1943, p. 536.

36. Harriman, Roucek, op. cit., p. 162

37. L. L. and Jesse Bernard, op. cit., p. 31

38. ibid, p. 546

39. ibid, p. 544

40. Harriman, op. cit., p. 163

41. L. L. Bernard, op. cit., p. 339

42. ibid, p. 339

43. ibid, p. 339

Footnote 34

Table 1

	First Course	First Dept. Chair	Institution	Prof. Assoc.	Grad. Seminar
Anthropology	Mid 1880's	1886 More after 1900	U. of Penn.		
Psychology	1875	1889	Harvard	1893-APA	
Sociology	1872-Yale	1889	Columbia	1905-ASS	
Political Science		1880 1890's	Columbia Chicago, MI	After 1900 APSA	
Economics		1871	Harvard	1885-AEA	
History		1839	Harvard	1884-1884	1871 Harvard 1876 John Hopkins

44. Gladys Bryson, "Social Considered as Moral Philosophy", Sociological Review, Vol. 24, p. 36.

45. G. Duncan Mitchell, 100 Years of Sociology, Aldine Publishing Co., Chicago, 1968, p. 219.

46. Allport, op. cit., pg. 19

47. L. L. Bernard, op. cit., p. 340

48. ibid, p. 340

49. ibid, p. 340

50. Harriman, op. cit., p. 167

51. Frederick Rudolph, The American College and University, Knopt, NY, 1962.

52. Haddow, op. cit., p. 259

53. L. L. Bernard, op. cit., p. 341

54. The Establishment of Empirical Sociology, Anthony Oberschall (ed.), Harper and Row, NY, Evanston, San Francisco, London, 1972, pp. 188-9.

55. ibid, p. 189

56. ibid, p. 337

57. ibid, p. 338

58. ibid, p. 338

59. ibid, p. 338

60. ibid, p. 338

61. ibid, p. 329

62. ibid, p. 328

63. ibid, p. 328

64. ibid, p. 328

65. op. cit., Harriman, p. 12

66. ibid, p. 12

67. ibid, p. 12

68. op. cit., Haddow, p. 175, 181

69. Harriman, op. cit., p. 13

70. ibid, p. 13

71. ibid, p. 13

72. op. cit., Haddow, p. 233

73. ibid, p. 178

74. ibid, p. 217, 209

75. ibid, p. 262

76. ibid, p. 264

77. ibid, p. 180

78. ibid, p. 263

79. "Economic Investing in the United States", Jacob Hollander, Review, Vol 12, 1903, p. 26.

80. "The Founding and Early History of the AEA", Rich T. Ely, Economic Review, 1936, p. 145.

81. op. cit., Haddow, p. 226

82. "Emergence", Bryson, op. cit., p. 316

83. op. cit., L. L. Bernard, p. 337

84. op. cit., Boring, p. IX-X

85. ibid, p. 533

86. ibid, p. 411

87. Harriman, op. cit., p. 242

88. op. cit., Boring, p. 552-3

89. ibid, p. 556

90. ibid, p. 561

91. ibid, p. 522

92. ibid, p. 511

93. ibid, Ch. 22

94. ibid, Ch. 22

95. Engels Anti-Dulring, in Lewis Feur, Marx and Engels, p. 279

96. Marcuse, op. cit., p. 322

97. Capital, Vol. I, p. 82, Modern Library, 1932

98. Introduction to Critique of Politcal Economics, International Pub, 1970.

99. Barrington More, in Society on Trial, ed. by M. Stein, A. Vidich, p. 89.

100. This example taken from unpublished notes from Marxist Economics 391, University of Wisconsin, Spring, 1972.

101. Letter from Marx to P. V. Annenkov, Marx and Engels Selected Works, International Publishers, p. 673.

102. Introduction to Critique of Political Economy, Int. Pub., 1970, p. 190.

103. Marcuse, op. cit., p. 378

104. Social Science Research Organization in American Colleges and Universities, Wilson Gee, D. Appleton Century/c. Inc., 1934.

105. "The Funding of Social Science Research", Harry Alpert, in Trends in Social Science, ed. Conald P. Ray, Philosophical Library, 1961.

106. op. cit., Gee, p. 225

107. Robert Lynd, "The effects of the present international situation upon research programs in the social sciences," in Proceedings of Conference of Representatives of University Social Science Research Organizations, 1939, p. 38.

108. Mark May, "A Retrospective View of the Institute of Human Relations at Yale," Behavior Science Notes, Vol. 6, #3, 1971, p. 42.

109. ibid, p. 141-72

110. ibid, p. 141

111. ibid, p. 159

112. ibid, p. 167

113. ibid, p. 167

114. ibid, p. 168

115. Research Centers Directory, ed. Archie M. Palmer, Gale Research Co., Detroit, 1960, 1968, 1972.

116. Interview with Eleanor Barber, May 22, 1974

117. Hans Zetterberg, Sociology in the United States, UNESCO, 1956, p. 12.

118. Language and Area Studies Review, Richard Lambert, AAPSS, 1973.

119. ibid, p. 139

120. ibid, p. 140

121. ibid, p. 141

122. ibid, p. 332-3

124. ibid, p. 333

125. ibid, p. 333

126. Loren Baritz, The Servants of Power, Wesleyan University Press, 1960, p. 168-9.

127. ibid, p. 204

128. Quoted in ibid, p. 204

129. The Behavioral and Social Sciences: Outlook and Needs, p. 10-11, Prentice Hall, Englewood Cliffs, NJ, 1969.

130. Interdisciplinary Relationships in the Social Sciences, Muzafer and Caroline Sherif, 1969, Aldine Publishing Co., Chicago.

131. Proceedings of the Ninth Annual Meeting of the Council of Graduate Schools in the United States, Washington, DC, 1969.

132. Interdisciplinarity, Problems of Research and Teaching in Universities, OECD, 1972.

133. ibid, p. 48

134. See op. cit., Smelser; Sociology: A Guide to Problems and Literature, Bottomore, Chapter 4; Lazarsfeld LRDC Memo on donor recipient sketch of social sciences.

135. Neil Smelser, "Sociology and the Other Social Sciences", in The Uses of Sociology, Lazarsfeld, Sewell, Wilensky (eds.), Basic Books, Inc., NY, 1967, p. 7-8.

136. Norman W. Storer, "Relations Among Scientific Disciplines", in The Social Contexts of Research, Saad Z. Nagi, Ronald Corwin, Wiley-Interscience Press, 1972, p. 232, NY

137. Jean Piaget, "The Epistomology of Interdisciplinary Relationships", in Interdisciplinarity, Organization for Economic Cooperation and Development, 1972.

138. Jean Piaget, Main Trends in Interdisciplinary Rsch. Harper and Row, NY, San Francisco, London, 1970, p. 66.

139. Piaget, op. cit., p. 129

140. ibid, p. 128

141. Storer, op. cit., p. 230

142. See Anthony J. Stone, "The Interdisciplinary Research Team"; op. cit., OECD rept; Margaret Luszki, Interdisciplinary Research Team; Methods and Problems; Pierre de Bie, "multidisciplinary problem-focused research; Ray Borsch, "The concept of multidisciplinariness"; Council of Grad. Schools -- op. cit.;

143. op. cit., OECD Report, p. 88

144. Piaget, op. cit., Main Trends in Interdisciplinary Research, p. 56-7.

145. op. cit., OECD Report, p. 88

146. op. cit., Council of Grad. Schools, p. 75-81

147. The Organization, Management and Tactics of Social Research, ed. Richard O'Toole, article by Peter Rossi, Schenkman, Co.; Cambridge, Mass. and London, 1971.

148. Asa Briggs in OECD Report, p. 220

149. ibid, p. 220

150. Peter Selznick, quoted in Ph. D dissertation of Hannah Ruth Wartenberg, Columbia University, 1972, p. 225-6, "From Seminar to Rsch. Bureau: A Case Study of Structural Change".

151. op. cit., BASS Report, p. 199, Wartenberg, p. 221

152. op. cit., Sherif and Sherif, "Interdisciplinary Coordination as a Validity Check: Retrospect and Prospects," p. 3-21.

153. ibid, p. 7

154. ibid, p. 10

155. ibid, p. 11

156. The Use of Social Science: Behavioral Science and National Policy Making, Irving Horowitz, p. 3, Transaction Books, New Brunswick, NY, 1971.

157. op. cit., Council of Grad. Schools, Bryce Crawford, "The support of inter- and trans-disciplinary programs", p. 82.

158. op. cit., Alpert, p. 77-8

159. OECD and Council of Grad. Schools Reports

160. op. cit., p. 82, p. 78 (Crawford)

161. BASS Report

162. BASS Report

163. See Terry Clark, Prophets and Patrons: The French University and the Emergence of the Social Sciences, and Philip Abrams, The Origins of British Sociology: 1834-1913.

164. op. cit., Alpert, p. 77

165. anonymous interview

166. op. cit., Mark May, p. 168

167. Peter Gay, "History as an Interdisciplinary Discipline," speech to Columbia University, General Education Seminar, March 27 issue of Seminar Reports, p. 8.

168. op. cit., Barber interview

169 "Social Science for Social Policy, "Herbert Gans in Horowitz, (op. cit.,) p. 19.

170. ibid, p. 20-2

171. Interview with David Finke, SUNY Stonybrook Social Welfare Department

172. Policy and Program Research in a University Setting: A Case Study, p. 9, National Academy of Sciences, Washington, DC, 1971.

173. The following description comes from (ibid) .

174. ibid, p. 16

ALTERNATIVE APPROACHES TO POLICY MAKING:
EXPLORATION OF RATIONAL AND INCREMENTAL APPROACHES TO POLICY, THEIR ADMINISTRATIVE TRADITIONS AND AREAS OF CONTROVERSY

Meryln Kettering

Policy-making is the determination of general frameworks for the identification and resolution of societal and organizational issues. Policy-making involves not only the substantial direction of policy decisions, but the processes of decision-making as well. The policy domain is inclusive of the most crucial and fundamental decisions which determine the future of the concerned society or organization. For example, national policy-making often determines the division and allocation of resources and responsibilities between public and private sectors, the distribution of national goods and properties, the scope of government, the extent of public controls, the content and hierarchy of national priorities, and the directions of national actions.

Awareness of the critical role of policy-making has grown in the most recent decades. On a national level, it has become crucial along with awareness of the need for more sophisticated administrative theories and structures to deal with rapid social and technological change characteristic of the modern world, and to eliminate disastrous (and unintended) consequences of policies in an increasingly complex and interdependent world. Policy-making is characterized by a high sense of responsibility, initiative, and risk in the face of complex problems, such as population explosions and food shortages, total war capabilities, galloping technologies, rising mass expectations, social turbulence, and resource limitations.

Policy-making is critical in the determination of the future, not only on the global and national levels, as indicated above, but also on regional, community, and organizational levels. Most work done on policy-making has been on the organizational level, but in the modern

world of inter-organizational, inter-societal, and inter-level inter-dependency, policy often has broad and reverberating impacts far beyond the immediate policy-making organization and situation.

Policy-making is part of the configuration of processes known as decision making. It is probably the most important aspect of decision making. That is, an inefficient organization working in an acceptable direction is better for the society and its future than an efficient organization going in an unacceptable direction. (G. Caiden, 1971, 75) The logic of that statement is simply that the latter's efficiency only compounds the policy-making error. Of course, the difficulty lies in the determination of what is an acceptable, right, or good direction. This is the complicated arena of policy-making.

Throughout this essay we attempt to utilize a rather simple definition of policy-making. Policy-making is basically a "statement of intent". A "statement of intent" has the implications (which are not so simple) that:

(1) a particular object, set of objects, or area are designated to be affected (either in the environment or organization);

(2) there is some statement as to what the affect is to be, how it is to be affected, and perhaps, why it is to be affected;

(3) particular sequences of behavior which are desired in relation to the affect are identified; and

(4) actions can be identified and undertaken in the implementation of the statement of intent.

Policy-making is not a well-developed field of study. Though fairly clear definitions of policy-making are possible, there is little consensus regarding either the nature or the domain of policy-making. Its place in the social sciences is not clear. The placing of policy-

making in any one field does not aid in understanding policy-making. (A. Ranney, 1968) It is eclectic and draws from the knowledge and methodologies of many areas and yet is not well developed enough to carve out its own identity.

This essay is intended to be an introduction to the study of policy-making. The framework developed in the essay dramatizes basic themes in policy-making by creating a major controversy--a controversy between rationalistic and incrementalistic approaches to policy-making. Though this controversy was created for essentially heuristic purposes, there is basis for such a controversy in the literature which has been researched for this essay. Although the authors whose works are utilized to illustrate the areas of and the natures of the controversy between these two approaches did not address each other intensively in debate and dialogue, the controversy is no less real. It is interesting that although the controversy was initiated in policy-making literature (D. Braybrooke & Lindblom, 1963), the relevant representatives of rational incremental approaches have seldom directly faced one another. Each side of the controversy appears to have its own area or domain and feels little need for confrontation with an opposing approach or ideology. In this sense, the controversy is more created than actual.

Though the controversy is created, it does, in fact, come from familiarity with a wide range of study in policy-making and administration. For the purposes of this essay, it is felt that the framework of controversy is useful for understanding and analyzing policy-making literature. The creation and exaggeration of controversy between

rational and incremental approaches to policy-making provides a framework for synthesizing and relating various aspects of literature on policy-making and administration. Though the controversy is presented here for heuristic purposes, the nature and depth of the controversy is demonstrated in the consideration of administrative traditions which can be associated with these approaches to policy-making. The nature of the controversy is illustrated in the extent to which the approaches form poles around which coherent administrative traditions can be drawn. The approaches and their relevant administrative traditions also illustrate the extent to which themes within particular approaches stand in contradistinction to one another. Through this argument, the controversy, though constructed for the heuristic purposes of the essay, becomes an actual controversy in which the areas of divergence are clear and critical.

Although the creation and exaggeration of the controversy which provides a heuristic framework for synthesizing and analyzing the literature of policy-making and administration is limited to literature in this essay, it is felt that the framework would also be useful for analysis and practice in actual policy-making situations. The themes upon which the controversy is based are real and divergent, making the controversy an actual reality as demonstrated in administrative practices which may stem from the opposing approaches. Though synthesis of the approaches is considered, the controversy is deep enough that one of the approaches will dominate. In reality, there may be various forms of synthesis, but as the controversy is essentially unresolvable, the synthesis will tend to be unstable indicated by a movement toward

a dominance of the philosophy and practice of either the rationalistic or the incrementalistic model. But for the purpose of this essay, it is intended that the framework of controversy only provide the opportunity for an understanding of policy-making and synthesis of the literature through the created, exaggerated, and idealized rationalistic and incrementalistic approaches to policy-making.

This essay is intended to be introductory to a study of the area of policy-making. The literature which has been researched for the purposes of this essay is not a body of literature which was developed around the central themes of the essay. In fact, many authors designated within this essay may not have been aware of other authors to whom they are related within the design of this essay. The essay attempts to synthesize into its framework a wide range of studies which were not initially addressing each other. It presents the analysis and synthesis of an acquaintance with the fields of administration and policy-making through the creation of a controversy between two approaches to planning and policy-making. The controversy, specifically between rational-deductive approaches to policy and disjointed-incremental approaches to policy, is not based on a dialogue between the authors which are designated as relevant in the framework of this study. The controversy is based on the literature in the fields of administration and policy-making, and is initiated in this literature. (Particularly in the works of C. E. Lindblom and related authors) However, for the essay, this controversy has been constructed to illustrate the extent to which themes within particular approaches to policy-making and administration can stand in contradistinction to one another. The creation and exaggeration of controversy provides the framework for synthesizing and analyzing the literature of policy-making and administration. Here, it is intended to be heuristically useful. It is suggested that the framework of the controversy is also useful for the practice and the analysis of policy-making. Thus, though the controversy is, in some senses, less than actual, it is, in other senses, very real. This is

demonstrated in the consideration of the administrative traditions which are associated with the approaches to policy-making.

I. AN UNDERSTANDING OF POLICY-MAKING

This section of the essay is an introduction to an understanding of policy-making. Policy-making is related to an organizational context with some discussion regarding the perimeters of the study policy-makers and policy-making. The intention is to emphasize the perspective that an understanding of policy-making comes from a study of the essence and characteristics of policy-making actors and processes rather than from a definitive discussion of the boundaries of policy-making as a subject area.

* * * * * *

Policy-makers are involved in the task of allocating organizational resources. Organizations have been defined as social units or human groupings deliberately constructed and reconstructed to seek specific goals. (T. Parsons, 1960, 17) Policy-making processes attempt to implement the interests and values which will attribute to organizational goals.

We live in an organizational society. Our lives are bounded by organizations. Our birth is in an organization, our education, our working and leisure activities, even our deaths. Organizations are an integral part of every life and every society--hospitals, educational institutions, business enterprises, religious organizations, the state, etc.

> In contrast to earlier societies, modern socitey has placed a high value on rationality, effectiveness and efficiency. Modern civilization depends largely up organizations as the most rational and efficient forms of social grouping known. By coordinating a large number of human actions, the organization creates a powerful social tool. It combines its personnel with its resources, weaving together its leaders, experts, workers, machines, and raw materials. At the same time it continually evaluates how well it is performing and tries to adjust itself accordingly in order to achieve its goals. (A. Etzioni, 1964, 1)

The emphasis on rationality, effectiveness and efficiency in modern organizations and organizational actions highlights the significance of goals and goal attainment for organizations. However, the perspective of organizational existence based solely on specified goals and goal attainment is rather simplistic. The nature of organizational goals is not so clear. Organizational goals can be defined as 'states of affairs' which organizations attempt to realize, or as 'desired images' of the future. (Etzioni, 1964, ch.2) Goals, however defined, are complicated in that they may be overt and covert, manifest and latent. Goal displacement or distortion may occur. There may be goal succession, multiplication, and expansion or contraction through the history of organizations. Goals may be hierarchically arranged, dependent on a listing of priorities. Goals may also be in conflict or competition. In short, organizational goals are not so simply and clearly defined as may be suggested by the initial statement of the essay.

An understanding of the nature of organizational goals is the basis of an understanding of policy-making and approaches to policy-making. Policy-making and goals are intertwined, but even more critical to this essay, an understanding of the nature of organizational goals is the

basis of choices of approaches to policy-making and policy-making studies. In beginning to examine policy-making approaches in this essay, we begin with the proposition that policy-making can be defined as essentially involving "statements of intent". (G. Benveniste, 1972, 34) As statements of intent, the following characteristics can be identified with policy-making:

(1) They are statements about characteristics of future events;

(2) They contain either implicitly or explicitly sets of values stated in the forms of objectives or goals;

(3) They identify processes and mechanisms for implementing the values through prescribed actions; and

(4) They are social and organizational phenomena (as opposed to individual or atomistic phenomena) which consequently incorporate the coordination of individuals and groups as subsets of a larger system which forms observable aggregated social activity. (C. Lindblom, 1968, 4-5)

Many studies of policy-making are primarily characterized as attempts to identify and study the roles and actors which are legitimized (to a greater or lesser degree) by social organizations to participate in the processes of policy-making. Early studies of roles and actors focused on elitist stratification theories which assumed that policy-makers are a clearly identified elite with whom policy-making powers are concentrated. (e.g., F. Hunter, 1953) There was a tendency to assume that reputed power was actual power, and often it is true that the impact of a few on the total organization or community is so strong that it can appear to be the most significant.

Later studies were sophisticated by the inclusion of such pluralistic concepts as: (1) policy-making is tied to issues such that mobilization of influences within decision-making processes is relative

to specific and general themes or issues, and (2) policy-making involves the actors throughout the entire process of decision, not just those concentrated near the very conclusion of the process. (e.g., R. Dahl, 1961) These studies attempt to distinguish between various degrees of influence and power as well as between the potential for control and the potential for power. It is a sophistication and complication of the understanding of policy-making and decision-making and accepts as central the existence of issues around which organizations and groups aggregate and mobilize.

Though the study and understanding of policy-making has been sophisticated, refined and complicated--as suggested and superficially commented upon above--some recent research has shown that these earlier studies still have validity. For example, recent studies show that there is still a substantial concentration of action and power among significant actors. (Conway & Feigert, 1972, 185-190)

The impact of a sophisticated understanding of the policy-making processes led to the realization that policy-making was not just the conclusive decision-making acts. This has led to the elaboration of phases or stages in policy-making. A seminal paper on policy-making phases identifies five phases: (1) problem selection; (2) proposal formulation; (3) policy selection or decision; (4) policy implementation; and (5) policy appraisal. (McDougall & Lasswell, 1959) Other phases and stages have been identified and used in analysis, such as the resolution of differences of opinions or conflicts between various groups or members, but the above are fairly widely accepted as basic phases in policy-making analysis.

The examination of policy-making beyond the identification of major actors and roles assumes that there exist some identifiable or regularized patterns within these processes, i.e., that each study will not be extremely idiographic or limited to each unique set of actors or each unique situation. As noted above, this has led to the identification of sequences of phases in policy-making. The various attempts to elaborate the phases of policy-making have included, at a minimum, the following:

> (1) intellectual activities of perception, analysis and choice which are often subsumed under the concept of 'decision-making';
>
> (2) social processes of implementing policies formulated by means of organizational structure, systems of measurement and allocation, and systems to ensure performance and regulation; and
>
> (3) dynamic processes of revising policy and plans as changes in organizational resources, goals and environment dictate adjustment within the context of the initial problem, policy, or considerations. (Bauer & Gergen, 1968, 2)

An understanding of policy-making involves the entire range of decisions, not just those which are the conclusive decision-making acts which define general policy. They include planning, implementation and revision of decisions.

> It is the distinctive mission of the policy-maker that he must allocate scarce resources and must mediate among conflicting sets of values and interests. He must form judgements specific to the situation with which he is confronted.... Finally, he must balance each individual issue off against a wide range of other issues, including not only those that presently exist, but those that exist in the future. (Bauer & Gergen, 1968, 3)

So the understanding of policy-making in an organizational context becomes obscured not only by the complications in an understanding of

organizational goals, as noted above, but by similar complications in understanding and identifying the roles, actors, and even the issues which fall within the scope of policy-making. There is a wide range of the degrees and kinds of influences and power which are exercised by various roles and actors. These are shifting and may be actual or potential. Also, there is a fluidity of key or central issues, trade-offs between issues, issue conflicts and impacts of past and future issues.

Policy-makers are involved in making decisions which require judgement specific to their organizational and situational contexts. However, in identifying those decisions with which the policy-maker is involved, i.e., those which are of a policy nature, it is perhaps easier to establish boundaries by identifying those decisions which are <u>not</u> of a policy nature. Policy decisions are not those which may be repetitive and which may require little cognitation. They are not those decisions which have limited scope, impact, or consequence.

By implication, this defines policy decisions as those decisions which require considerable judgement, those which require much and diverse information. They are decisions which have broad impacts and considerable consequence. Such decisions have been referred to as "critical decisions" and "strategic decisions", based on the importance of the issues and the decisions to their organizational context. (P. Selznick, 1957)

Obviously, this definition of policy decisions is quite ambiguous. It does not establish boundaries of a universal nature for identifying those decisions and issues which fall within the considerations and

scope of policy-making. The ambiguity is perhaps unavoidable and inevitable, given the generality of our discussion in this essay. The ambiguity is also very conscious and deliberate. The inclusion of a decision within the policy-sphere may depend on the level of the organization under examination as well as the perspectives of the persons involved in or observing the organizational phenomena which are the focus at a particular time.

Acknowledging the ambiguity, we shall continue the attempt to define policy-making with the statement that policy-making involves all those processes which revolve around critical and strategic issues, events and decisions. Critical events and decisions are judged by the perceived importance of the issues to their organizational context. Strategic events and decisions are those which direct an organization's critical and scarce resources toward perceived and desired opportunities while adapting to a changing environment. (Bauer & Gergen, 1968, 16-18)

We end this section of the discussion with a caveat regarding definitions. Gunnar Myrdal has observed that much "labor was often wasted on finding precise definitions of our several social science disciplines in the belief that this was an important activity." However, the validity of scientific inferences does not depend on their definition. He concludes that the "one and only type of concept which it is permissible to keep vague is the meaning of terms such as economics, sociology, or psychology." (M. Rein, 1968) We propose that it is likewise possible to explore the boundaries of policy-making, the relationships to other fields of study, the dimensions of the subject area, but the exploration will illustrate that the perimeters are not clear. The subject

is rather ambiguous. The lack of a precise definition, however, need not deter from an understanding of the substantive issues and dimensions involved in policy-making.

II. THE DIMENSION APPROACH TO POLICY-MAKING ANALYSIS

Policy-making studies have used a variety of approaches, as suggested earlier in this paper. Alternative approaches include the selection of sets of actors, decisions, or events for analysis, for example. In this paper, the focus is on an approach which emphasizes the selection of dimensions of policy-making as a conceptual approach to understanding policy-making. In exploring and studying policy-making, many different dimensions can be used to form an analytic scheme. Dimensions refer to particular conceptual tools and frameworks which permit the analytic aggregation and disaggregation of policy-making processes, events, decisions, acts, and actors.

This section of the essay is designed to be an introduction to the dimension approach to policy-making analysis. The work of three authors will be reviewed as exemplary of dimensional analysis of policy-making. The interest in these papers is in the selection of dimensions, the issues which the various dimensions raise and how the studies identified and utilized the concept of dimensions of policy-making. We are not examining or critiquing, in any way, the conclusions of the studies at this time, nor the validity or utility of the dimensions they have selected, nor the related methodologies. We are interested in understanding what the selection of analytical dimensions is and how analytical dimensions can provide a conceptual framework for looking at policy-making action or literature.

* * * * * *

1. Allison's Study of the Cuban Missile Crisis

The selection of particular dimensions or particular conceptual frameworks for analysis leads to consequential observations, policies, and orientations. This is as true for students of policy-making as it is for policy-makers. The relation between approaches and dimensions which are reflected in policy orientations have been highlighted in an examination of the Cuban Missile Crisis by Allison. (G. Allison, 1968) Policy-making is analyzed through three approaches, highlighting different dimensions of policy-making processes. The three approaches have been identified as: (1) A Rational Policy Model, (2) An Organizational Process Model, and (3) A Bureaucratic Politics Model.

First, he selects the Rational Policy Model. In this approach, there is an analogy between the government as an actor and the economic model of rational man who maximizes to achieve specific and explicit goals or ends. The government or state acts as a monolith or single body and its acts reflect obvious self interest. This approach emphasizes dimensions of rationality, allocation, achievement.

The second model, Organizational Process, emphasizes the interplay of the various points of view of different government organizations involved in the crisis and their particular attention to their diverse interests and routines which are determinants of their behaviors. In this model, the various organizations have their own limited perspectives, goals, values, and interests which form the basis of their acts and decisions in policy-making. Policies which are then perpetuated are then not those designed to meet specific rational ends of goals, but those which are based on previous experience, on previous decisions,

on other patterns of normalized organizational behavior. That is, policy reflects various organizational norms and regulations which compete and compromise with those of related organizations. Dimensions of incrementalism, adaptivity, and congruency, especially as based on regulations and the status quo is emphasized.

Allison's third model emphasizes the personalities and political interests of individual participants in the crisis. In this model, the internal politics of policy-making is not the result of conscious rationality, nor of organizational regulations and movements from the status quo. It is rather the reflection of conflict and argument within and between persons, both as individuals, and as representatives of organizations. Policies then reflect a continuous process of determining the relative positions and strengths of individuals and organizations or their respective constituencies. The dimensions of initiation, functions, and maintenance are highlighted among others by this approach.

None of the three models suggested by Allison in this analysis are new. The value of identifying the three models is that it makes it possible to examine the ideas and concepts which are related to the models and to explore their consequences in research and in action in a concrete situation. That is, in relation to an actual situation, the sets of assumptions, information and values associated with model or approach and which have been largely intuitive and implicit in many studies become more explicit. In the context of this essay, this becomes useful in assessing and in understanding the complexity of the processes of policy-making. It emphasizes the dimensions which various approaches imply and draws out the significance of conceptual frameworks which will be used in

THREE APPROACHES TO POLICY-MAKING: CUBAN MISSLE CRISIS

Model	Focus	Some Assumptions About Organizations
Rational Policy Model	The goals and behavior of total organization	Organization is monolithic and autonomous. Behavior is rational, i.e., goal-seeking and achievement-maximizing.
Organizational Process Model	The interaction of subgroups, norms, and experience which establish precedences	Organization reflects sub-gooup interests. Routines are determinants of behaviors. Interdependency is primary characteristic of organizational relations.
Bureaucratic Politics Model	The interaction of personalities and individual political interests	Organization reflects personal conflicts and the relative positions of power and influence among persons and their constituencies.

Figure 1

This figure summarizes the three approaches to policy analysis which G. Allison presents in his study of Conceptual Models and The Cuban Missle Crisis. Of particular interest to this essay is the extent to which assumptions inherent to the model of policy-making chosen to form the framework for policy analysis differ from those of other models. These assumptions then have a significant impact on the focus of policy analysis and on the conclusions of policy and policy analysis.

analysis of policy-making and the consequential conclusions for policy-makers or for researchers.

2. A Study of Policy-Making in People's Republic of China

In a study of policy-making for the Cultural Revolution of the People's Republic of China, the dimensions of Participation and Criteria for Decision are identified. (H. Harding, 1969) The dimension of Participation is based on the degree of and extent of participation in the processes of policy-making. This dimension has two basic categories, High Mass Participation and Low Mass Participation which is also called Elitist Participation. The dimension of Criteria for Decision also has two categories. Pragmatic Criteria are reflected in the domination of the factors of unique situations and sets of actors among the decision criteria employed in policy-making. Dogmatic Criteria, on the other hand, is the domination of established tradition and interpretation of Maoist Thought in decision criteria for policy-making.

Harding uses these dimensions to identify four distinct policy-making strategies:

PARTICIPATION	CRITERIA FOR DECISION	
	Pragmatic	Dogmatic
High Mass	Pragmatic Mass Line	Dogmatic Mass Line
Elitist	Pragmatic Elitist	Dogmatic Elitist

Figure 2

This figure illustrates the interaction of two dimensions of policy-making to form four distinct strategies.

The study compares and contrasts the various strategies and emphasizes the basic differences which exist in the characteristics of the processes of policy-making with the choice with a particular strategy or mode. Divergencies emerge in the choice of policies, tactics, and processes. For the purposes of this essay, we have drawn from Harding's observations and discussion of the divergencies following from strategy selection to show the utility of his choice of dimensions to contrast approaches to policy-making. These observations are limited to his analysis of the Chinese policy-making processes and are not intended to be generalized to other policy systems. (See summary in Harding, 1969, 13)

We will summarize the differences which were emphasized between two strategies along the dimensions noted above, Participation and Criteria for Decision. The strategies of Dogmatic Mass Line (DML) and Pragmatic Mass Line (PML) lead to significant differences. First, in summarizing policy choices, DML is highly dependent on a diagnostic model. That is, the identification of the correct policy option is according to the matching of the correct diagnosis with the correct prescription from the doctrinal source. The emphasis is on the doctrinal interpretation and its application to the situation which is being diagnosed. This is a very prescriptive and normative approach. PML, on the other hand, depends on the selection of the most feasible and acceptable option. That is, it emphasizes the policy option which has the highest expected utility in the specific situation. There is a high dependence on the rationality of feasibility, effectiveness, and efficiency in policy choice.

Harding points out quite appropriately that the number of options considered in PML and DML differ substantially, as well as the substance

of those options considered. PML and DML also call for significantly different types of expertise, information, analysis, and prediction. The processes of decision differ significantly also according to the degree of participation in the policy-making processes. It also follows that the differences in the criteria for decision affect quite strongly the processes. DML, for example, using dogma as the criteria for decision most often will compare policy options for their harmony with doctrine and tradition. The basis for resolution of disputes and conflicts then is the correctness of the diagnosis and the appropriateness of the dogmatic prescription, that is, the consistency with the interpretation of the dogma and with the accepted tradition. This implies that there is a universalistic interpretation of the criteria of decision which can be universally applied or implemented. Prescription and implementation can be learned and transfered to a wide variety of situations. PML, however, uses more pragmatic criteria which permit the comparison of possible solutions in the context of the concrete situation. The uniqueness of the situation and the decision are stressed rather than universal truths derived from tradition and dogma. Disputes and conflicts are then resolved through compromise or through agreement on the feasibility, effectiveness and efficiency of policy options, that is on costs and risk calculations according to performance or achievement evaluations.

There is also noted a difference in control functions and timing between the two strategies. Control comes through calculation and experimentation between alternative policies before the policy finalization and is then carried on throughout the implementation according to

COMPARISON OF DOGMATIC MASS-LINE (DML) AND PRAGMATIC MASS-LINE (PML)

Characteristic	DML	PML
Basic model	Diagnostic: identification of 'correct' option	Rational choice: selection of most feasible option, with highest expected utility
Basis of factions	Class standpoint	Different information, analyses, predictions
Number of options	Two	Several
Criteria for decision	Dogmatic: options compared with the doctrine	Pragmatic: options compared with each other in the context of the concrete situation
Basis for resolution of factional disputes	"Correctness"	Agreement on cost and risk calculations or compromise
Risk Control	Post-decision risk control through feedback and policy modification	Pre-decision risk control through prediction, calculation and experimentation

Figure 3 (adapted from H.Harding,1969,13)

This figure illustrates the comparison of two policy-making approaches along lines of major characteristics. The comparison permits a clearer understanding of the differences between the approaches, that is, the points of divergence can be summarized by looking at the characteristics of the approaches. Obviously, there is some controversy between the approaches around the themes of policy formulation and evaluation.

rationality considerations of efficiency and effectiveness in the PML strategy. Control in DML, however, comes after the decision phase of policy finalization and is basically designed through comparison of feedback against the dogmatic guidelines which have been interpreted as relevant and prescribed.

This study provides a fine example of the utility of identifying dimensions for analysis of policy-making. It illustrates how the selection of particular dimensions is useful in examining conceptual frameworks which lead to consequential policies, observations and orientations to policy-making. The choice of dimensions, in this case, permitted a combined analysis of actors, processes, and policy results.

3. A Dimensional Analysis of Planning Theory

To examine planning and policy-making, Faludi has chosen to emphasize dimensions or modes. He has selected three major issues or themes which dominate planning theory and uses each of these issues as a basis for the dimensions to form the analytic framework to understand planning theory. Each issue forms a basic dimension of planning or policy-making and each dimension has extreme ends. The dimensional continua are identified by their extremes: Blueprint--Process Dimensions, Rational-comprehensive --Disjointed-incremental Dimensions, and Normative--Functional Dimensions.

In the first continuum, the extreme ends emphasized are seen in a priority on Blueprint versus Process models of planning or policy-making. On the continuum of this dimension, the extreme Blueprint mode is characterized by the engineer aspects. That is, a great deal of rationalization and action specification is necessary for effectiveness. The objective is to remove as much uncertainty as possible and to attain the

desired effects and objectives in specified actions. It is assumed that such a great deal of certainty is possible. The Process mode, on the other hand, emphasizes the continuous nature of policy-making. Adaptation during implementation, for example, is a primary and inevitable part of the process incorporated from the initial phases of planning and policy-making. Feedback and the management of external and internal information requiring review, evaluation, and reformulation of policies is characteristic of the Process mode. The dichotomy in these two modes is seen primarily in the emphasis in control in the Blueprint mode which contrasts with the emphasis on interaction in the Process mode.

The issue related to the second dimension is the extent to which policy is to follow an ideal of rationality. This is to suggest, among other related concepts, the need to evaluate all conceivable alternatives. The extreme modes of this dimensional continuum are the Rational-comprehensive modes and the Disjointed-incrementalist modes. As this particular dimension is the focus of this essay, we will have the opportunity to follow quite intensively the policy implications around this dimension of planning and policy-making.

The third issue which Faludi chooses to emphasize is the degree of extension of the scope of rational policy selection and specifications. That is, to what extent policy-making should and does include the specification of means as well as ends. The extreme ends of this dimensional continuum are labeled as the Normative modes and the Functional modes. The Normative mode suggests that the attention should be entirely on the ends, goals, or objectives of policy, and this is the boundary of policy-making sphere for both policy-makers or researchers. The extreme mode,

DIMENSIONAL CONTINUA OF PLANNING AND POLICY-MAKING APPROACHES

ISSUES		
I. Blueprint ← - - - - - - - - - - - - - - - - - - → Process		
Firm, consistent	Image of Planning	Uncertain, adaptive
Complete	Control of Environment	Incomplete
Short	Internal and External Time-lags	Long
II. Rational-comprehensive ← - - - - - - - - - - → Disjointed-incremental		
Holistic	Image of society	Atomistic
Small	Relative autonomy of experts	Great
Narrow and Technical	Scope of influence	Wide, Technical and Value influences
III. Normative ← - - - - - - - - - - - - - - - - - - → Functional		
Bureaucratic	Role of experts	Political
Determined	Degree of influence	Varying

Figure 4 (adapted from A.Faludi,1973,pp.138,156,177)

The issues in this figure are illustrative of major points of controversy and divergence between various policy-making approaches. The antithetical positions of the identified approaches demonstrates the utility of dimensional analysis and the extent to which divergence between policy approaches may be irreconcilable.

Functional mode, suggests that the sphere of policy-making includes the specification of means and further concludes that such specification should be the primary activity and concern of policy-making.

These dimensions are useful in understanding not only theoretical approaches and related literature, but in understanding or analyzing actual policy-making situations and processes. They can form the basis for research and provide research hypotheses. The modes at the extreme ends of the continua are useful in identifying tendencies in policy-making rather than being actual characterizations of policy-making per se. That is, actual policy-making is not concentrated at the ends of the dimensional continua, but are somewhere between the extreme modes.

* * * * * *

It is possible to select from many dimensions to understand policy-making. Many of the dimensions will be inter-related and interdependent. For example, Rational-comprehensive modes can be identified closely with Blueprint and Functional modes of policy-making. Among other dimensions which might be identified, some literature deals with related concepts such as: (1) Adaptive and Development policy processes, (2) Allocative and Innovative policy processes, (3) Legitimizing and Change orientations, (4) Repressive and Liberative orientations. As can be seen in this essay, the selection of dimensions for policy-making analysis is actually only an initial stance which, upon examination and expansion, will begin to include, by implication or even explicitly, other dimensions. It will also exclude particular dimensions. This essay will illustrate the degree of interdependency among policy-making dimensions as we choose to move from an examination of Rational-comprehensive policy-making and Dis-

jointed-incremental policy-making approaches to an exploration of the administrative implication of these approaches.

III. TWO APPROACHES TO POLICY-MAKING

Of the many possible dimensions which may be used for action and/or analysis of policy-making, two have been selected for closer examination in this paper: a Rational Deductive-Approach and a Disjointed-Incremental Approach. Interpreted as dimensions, these approaches have been quite highly idealized and stylized in this essay. This abstraction is intentional. It will simplify the exploration of divergency between the two approaches. As suggested above in an examination of dimensional analysis of policy-making, these two approaches can be seen, on some levels, as opposite or extreme ends of one dimension of policy-making. This implies that the approaches are, on some points, mutually exclusive. As the points of divergence are explored, it will be seen that the approaches can form the basis of a controversy in policy analysis. In simplest terms, that means that the use or selection of one approach can exclude the use of the other approach. More realistically, the choice of one approach implies the exclusion of basic elements of the other approach.

The selection of an approach may be implicit or explicit; it may be intentional or intuitional. However, it can be seen that from the selection that implications and particular relations with other dimensions of policy-making may be inevitable, or at least, that the interrelationships of various dimensions will become quite distinct. This proposition is seen throughout the essay in the choice of study approaches

to policy analysis in relation to relevant administrative traditions. The proposition is that organizational action based or designed, explicitly or implicity, on particular dimensions and approaches to policy-making imposes particular patterns and images which have specific consequences for system organization, system actions, the nature of the outcomes of the processes of the system, and so on. That is, the selection of an approach to policy-making can be associated with particular administrative practices and traditions. Within each dimension and approach, specific assumptions regarding the nature of society, the nature of knowledge and information, the nature of man are embedded. Where significant divergence within these aspects occurs, there will be substantial divergence in problem selection, formation and expression of preferences, and consequently, the courses of action and policy along with the subsequent results will also differ significantly.

This paper is an exploration of two approaches to policy-making, a rational-deductive approach and a disjointed-incremental approach. The work of C. E. Lindblom provides the basis for this distinction initially. His work also suggests that a controversy is involved in the discussion and comparison of these approaches. Our first task will be to become acquainted with the basic characteristics of these approaches before we can continue into an exploration of divergencies, relevant administrative traditions and some consequential implications relevant to policy-making and policy analysis.

* * * * * *

1. The Rational-Deductive Approach (RDA)

This approach has been called the conventional analysis of political

action and policy-making. (H. Harding, 1969, 4) There is no one spokesperson who stands out as representative of this approach, but there are many who essentially use this approach to planning and policy-making or analysis. For example, Leys selects Tinbergen as exemplary of this approach and illustrates how the approach stands in contra-distinction to the incremental-disjointed approach. (C. Leys, 1969, 248) Another distinct use of this approach appears in the policy analysis literature of Dror. (Y. Dror, 1968) However, as represented in this essay, the rational-deductive approach has been idealized to the point that it is not easy to point to the works of one person who best exemplifies the approach. Rather a general approach is presented which condenses and combines the works of several authors into a more coherent presentation of the essential characteristics of the approach.

In the Rational-Deductive Approach (RDA), policy-making is basically a matter of choice. Choice is basically a matter of finding the appropriate responses to appropriate questions. (Bauer & Gergen, 1969, 27-28) The approach is most simply illustrated by questions such as, "What do we want?", "How can we best get it?", and logical sequitors of these questions. The necessity for developing RDA is that people and organizations generally want more than they can get. That is capabilities are limited, competition may be keen, resources are scarce. consequently, choices must be made from among competing desires, as not all desires can be satisfied.

Choices are formed through systematic analysis and formalized statements which clarify preferences among alternative choices. It is then possible to determine the allocation of scarce resources among

alternative choices and among competing desires and ends. Rationality, as a central concept in RDA, is the assertion of optimizing behavior to achieve the most highly preferred ends. Optimizing suggests that it will be done in the most efficient economic, and effective manner.

In its simplest form, RDA identifies two elements in an act of choice, an act of policy-making: (1) the set of alternatives from which the choice is to be made; and (2) the set of preferences according to which actors rank these alternatives. Alternatives can be identified by either listing all members of the set of feasible alternatives or a representative sample therefrom, or by stating the constraints or the characteristics which the alternatives must satisfy.

Elementary analysis can be initiated by breaking the acts of RDA into three sets:

(1) the statement of preferences;

(2) an exposition of alternative actions; and

(3) the relating of alternative actions to stated preferences so that efficient choice is made among alternatives.

A more sophisticated statement maintains the strong correspondences suggested above which are assumed to exist between the result and the goal, between the consequence and the objective. An exemplary statement of RDA assumes that the system or organization is teleological. That is, the system is characterized by goal-seeking behavior, is unitary in its action and decisions, and is rational in achieving its goals and objectives. (W. C. Churchman, 1971)

As seen by the following statement, the relation between goals and policies are primary, even in a more sophisticated statement of the phases of RDA:

> "... 1. purpose in relation to situation constitutes the action generating element of a given system; 2. the initial acts in the process are the conception of the most desirable ends--namely of long-term consequences valued as ideals; 3. the first decision concerning objectives is made in regard to such consequence and value assessments--if the best determinable alternative consequence does not satisfy the long-term value requirements, the system closes at the objective setting phase and feeds back into purpose so that a reconsideration of the proposed action becomes possible and so that a new action pattern embodying a different, more acceptable, consequence can be visualized or actually invented; 4. if the objective(s) do satisfy the value/consequence requirements, then the process continues to its subsequent phases through the setting of goals and decisions concerning the most relevant means, which then are directed to the selected result(s) that must, as a matter of course, be consonant with the long-term consequences that were initially defined; 5. it is, finally, with respect to consequences thus chosen that the result--outcome governed by the goal and the means--feeds back into the situation and changes reality in a manner that can be called "planned". (H. Ozbekhan, 1972, 68)

The tradition formed around RDA is based on several assumptions. These include the assumption that the establishment of sets or ranks of values and preferences (usually referred to as utility schemes) to evaluate actions and future consequences by an order of their desirability is possible. Another assumption is that problems are single, unitary, structurally identifiable, and have rather distinct boundaries. It is often assumed, as well, that problems will have solutions, and that when implemented, these solutions can eliminate the problem. A high degree of certainty and stability in relevant conditions of policy situations is often assumed. And, as noted above, it is assumed that there exists a 'rationality of behavior', that is that actions and decisions can be determined and judged by a ranking of alternatives. The theoretical consequence of these assumptions is seen in attempts to discover nomic relations which exist between actors, environments,

conditions, preferences, values, and choice selection among alternatives. Nomic relations, characteristic of a scientific orientation, identify laws of action and reaction so that given the aspects of a particular situation or interaction of elements, it is inevitable that particular consequences will follow. Nomic relations are assumed to exist irrespective of the uniqueness of situations, i.e., universalistic principles exist and can be discovered through research and experience and these universal principles can be transferred over time and space.

Certain difficulties are readily evident in RDA, and have been acknowledged by theorists and practicioners sympathetic to RDA. Primarily, the dominant alternative is rarely present. Dominant alternatives are elusive for a variety of reasons including: (1) the reality that the choice may affect more than one individual or group; (2) a diversity of interests and preferences must often be addressed; and (3) interests and preferences are shifting. Secondly, the outcomes resulting from a range of choices are seldom known with a high degree of certainty. Further, all the consequences of the choices and actions may not occur immediately or within the timing anticipated. For example, consequences may be deferred, unintentional, or accentuated.

Sophistications of the basic RDA have attempted to minimize the complications arising from these acknowledged difficulties. These include the construction of indifference maps to measure the rates of marginal substitutional and marginal rates of transformation, i.e., the willingness and the possibility of exchange between preferences. Other sophistications on RDA include ranking systems which go beyond the simplistic ranking of alternatives by one attribute, explicit analysis

of variables within specific preference functions, definition and clustering of values underlying objectives and goals established to guide choices among alternatives. Methods have also been designed to permit the consideration of non-marketable and non-quantifiable alternatives, the prediction of uncertainties, and the ranking of alternatives by the priority of process or procedure of policy-making and implementation over other criteria of optimization. Spatial, temporal, and distributional dimensions have also been explicitly incorporated into some methods relevant to RDA.

However, the majority of these sophistications are still basically designed around the central criteria of optimization and efficiency in choice, and still strive for perceived improvement by the selection of the best alternatives for the situation. RDA, therefore, is normative, i.e., it establishes an ideal pattern of behavior for a situation or a set of situations, or a set of ideal guidelines for the ideal behavior for those situations. The normative nature of RDA will become more obvious later in this essay as we examine the relevant administrative traditions.

2. The Disjointed-Incremental Approach (DIA)

The work of C. E. Lindblom is the most systematic treatment of this approach. As a major spokesperson for this approach, he argues that policy-making processes should be analyzed, and strategies constructed, by examining the way in which organizations actually go about making their critical decisions and handling strategic events. (Braybrooke & Lindblom, 1963, ch.1) This is obviously more of a descriptive approach to policy-making analysis than the more normative

approach of RDA. The themes of Disjointed-Incremental Approaches (DIA) revolve around the behavior of organizations in reality, rather than the construction of normative statements and nomic relationships about what organizations 'should' do. Lindblom asserts that RDA does not relate to organizational reality, nor to the nature of knowledge within the area of policy-making.

> The synoptic approach makes such comprehensive demands for information and analysis that theories are desperately needed merely to discipline the gathering of information and to organize the multiple implications of whatever evidence is gathered. Yet theories of this sort, highly structured bodies of generalizations that systematically employ concepts offering some approximation of axiomatic treatment, have simply not been developed for most of the topics that fall within the field of public policy evaluation. (p.49)

The approach which Lindblom presents has been titled Disjointed-Incrementalism and he proposes that Disjointed-Incrementalism (DIA) is useful for analysis and action, planning and policy-making. DIA describes a "set of practices that, however subtly and idiosyncratically each mind works, represents a point of convergence for policy analysts in their adaptations to the difficulties of problem solving and evaluation. The set of adaptations is relatively simple, crude, almost wholly conscious and public...." (p.82) In fact, they are seen to be so simple, that they are seldom perceived to constitute the systematic and defensible strategy which they do. Taken together, Lindblom asserts, they actually do form a "mutually reinforcing set of adaptations with rational and systematic coherence." (p.82)

It is readily obvious that rationality, as the concept is employed here, is not the same as employed in RDA. The essence of rationality in DIA is not the ultimate construction of nomic, universal relations,

nor the ultimate construction of ideals (which are often unattainable and impractical in the sense of DIA). Rationality is rather, the matching of actual practices of policy-making to the environment in which policy-making is embedded, that is, in relation to actual political-social-economic contexts and capacities. In this understanding of rationality, feasibility is more important than logical consistency or rule identification. The analysis of policy situations is a paramount concern.

Lindblom poses two dimensions of policy situations which are related to policy-making: (1) the degree of understanding of cause and effect in the situation; and (2) the degree of change which is sought. He notes that he is basically addressing those changes which are incremental, not revolutionary, in his analysis for policy-making. He is also concerned with decisions where the understanding of cause and effect is low, i.e., where the solution is not calculatable, repetitious, or routine. This lack of understanding may exist either because of low consensus or a lack of understanding regarding the action-consequence assumptions which might be utilized in a situation. It may be noted that this corresponds closely with our earlier discussion of policy, but we did not discuss the limitation of issues of change to incremental, rather than revolutionary changes, i.e., smaller rather than larger changes. Though these are useful categories, it is often difficult to determine which changes are revolutionary and which are incremental in reality as most changes occur in patterns of activities rather than as isolated activities/decisions.

Although there may always be some divergence of opinion of the significance of a particular change, Lindblom notes that there will always be sufficient convergence of opinion, because, while "people favor (or disfavor) contrary things, they make issues of the same topics and because they tend to agree on which factors are important for theoretical explanations of change." (p.70) Incremental change includes "any changes permitted within the smallest set of patterns, as well as some of the smaller changes within the larger patterns, including very small changes in the very largest." (p.65)

The set of behavioral rules comprising DIA are proposed because they seem to be better adapted than the ideals of RDA to the practical needs and limitations under which people do actually make policy choices. The features of this approach can be used to identify the range of alternatives which should be considered, and the rational processes for making plans and policy.

The elements of DIA are highly correlated to Lindblom's critique of RDA. The features of this critique are based on specific adaptations which RDA is uncapable of making:

(1) Man's intellectual capacities are limited;
(2) Man's knowledge is limited;
(3) Extensive analysis is costly;
(4) Analysts inevitable to construct a complete rational-deductive system (or a welfare function);
(5) The interdependencies between fact and value is very significant, but overlooked in RDA;
(6) The openness of systems to be analyzed is significant;
(7) The analysis need strategic sequences to guide analysis and evaluation; and
(8) There is a large diversity of forms in which policy problems actually arise.

The elements featured in the model of DIA, as presented by Lindblom, are:

(1) Marginal-dependent choice;
(2) Restricted variety of policy alternatives considered;
(3) Restricted number of consequences considered;
(4) Adjustment of objectives to policies;
(5) Reconstructive treatment of data;
(6) Serial analysis and evaluation;
(7) Remedial orientation of analysis and evaluation; and
(8) Social fragmentation of analysis and evaluation.

We will examine each of these elements in some detail below.

Marginal-Dependent Choice is constructed from the observation that policy-makers have an idea of present conditions, objectives, and policies, and that these form the basis or beginning point of policy-making. In seeking to improve the present, they must obtain more information about the present. Consequently, alternatives are compared in terms of their similarity to the present--the status quo. Information about alternatives to the present is derived from historical experience, contemporary experiences, and/or simulations of experience.

> A dominant characteristic, then of their investigations is that they focus on the increments by which the social status that might result from alternative policies differ from the status quo. To put the point in other terms, their investigations are concerned with margins at which it is contemplated that social status might be changed from that existing. (p.84)

This differs radically from the ranking of social status in RDA. It certainly reduces demands on the system. It also identifies increments by which consequences of policies differ so that no conceptualization of a total complex and comprehensive social state is necessary. It is less abstract and distracting to the analyst, so that ultimately proposed policies are more feasible, and therefore, more rational.

It then follows that a Restricted Variety of Alternatives will be considered. Specifically, those alternatives will be considered which incrementally differ from the status quo or which can be based on the status quo. This restriction is also further limited in that not even all increments to the present are considered, "given the discontinuities in the adjustments by which policies can be varied, given certain characteristics in the ways individuals describe and explain policies, and given failures in imagination and other restrictions on the infinite multiplication of alternative policies." (p.83)

The third element featured in Lindblom's treatment of DIA is that for any given policy alternative, only a Restricted Number of Consequences are considered. This is necessary and realistic. It is also desirable. The need for simplification limits the elements of social structures and processes which are considered beyond the realm of concern. Elements may be excluded for a variety of reasons; their extreme stability, the universality of knowledge regarding their specific consequences; their extreme instability; the paucity of knowledge which may be used to judge consequences, social and spatio-temporal distances making analysis too costly and uncertain; and any of a number of other reasons. This element of DIA emphasizes the establishment of the domain and boundaries of policy and alternatives, with explicit parameters of consideration.

The fourth element of DIA is the acknowledgment of the Adjustment of Objectives to Policies. Policy objectives shift throughout the policy-making process. These shifts may occur for many reasons, such as the former objective becoming impossible, unacceptable, infeasible, or irrelevant. The perspective of RDA postulates that means are adjusted

to ends, i.e., policies are sought which will attain the specified objectives, but Lindblom notes the significance of the revefse of that relationship of one-way adjustment.

> Since the reverse adjustment is superimposed on the conventionally conceived adjustment of means to ends, the net result is a reciprocal relationship between ends and means or between policies and values that is different from that envisaged in the synoptic ideal. (p.93)

The point is simply that objectives are not absolutes. While the policy-maker contemplates means, he continually and simultaneously contemplates objectives. In RDA, the objectives must be ideally established and stabilized before the selection of the appropriate means. In DIA, the objectives need not be absolute nor stabilized. Objectives actually appear in sets and matrices of interrelationships. Policy-making involves the adjustment (and perhaps, even the discarding or innovation) of objectives as more information becomes available, such as information on costs, feasibilities, instruments, implementations, and changes in the policy situation or preferences.

From the adjustment of objectives of policies, it can be seen that there must be continual Reconstructive Treatment of Data. The basic aspect of this element is that DIA shows a tendency to deal with themes and their values throughout the entire policy-making processes.

> The strategy (DIA) seizes the reconstructive opportunities that are latent in the multiplicity and fluidity of values. Multiplicity and fluidity are by no means absolute drawbacks to rational evaluation.... Fluid themes invite, as settled sets of rules do not, exploratory responses—attempts to meet concrete demands of specific circumstances as imaginatively as is compatible with meeting them appropriately. (p.99)

With the transformation of problems, as implied by the adjustment of objectives to policies, there is reconstructive treatment of data, which is a consequence of the reciprocal relationship of ends and means throughout the policy process. "As fact-systems are restructured and proposals are redesigned, shifts occur in the values deemed relevant to settling the questions." (p.98) This process is also reciprocal, in the sense that shifts in values and themes likewise affect the attention to various fact-systems and policy designs.

From the reciprocity of processes, as noted above, it is proposed that Analysis and Evaluation is Serial. It is thus adapted to continual change. As policy analysis is incremental, exploratory, serial, and marked by the adjustment of ends and means, it is also expected that long-term aspirations will not appear as stable, dominant critical values. There will be, rather, constant Re-orientation and Remedial Orientation in these serial analyses and evaluations. This is an extremely important point as it highlights the complexity of the organizational learning processes which are involved with planning and policy-making. In RDA, organizational learning comes through the evaluation of the appropriateness of the policy after the consequences and actions have been completed, and so that the learning can be applied to another situation and decision. In DIA, however, organizational learning involves a remedial dimension which is continuous and concurrent with policy-making, and not concentrated at the culmination of policy-making. The relevance of practical versus dogmatic criteria of decision are evident in this aspect of the controversy between RDA and DIA. In DIA, organizational learning involves a remedial dimension through the significant

inclusion of learning and objective establishment through dangers or ills to be avoided (negative learning), as well as from the more positivistic learning of successes and the post-process evaluations characteristic of RDA.

The final element of DIA is that analysis and evaluation in the policy processes occur at a large number of points throughout the system, i.e., it is Socially Fragmented. This is one reason for the term "disjointed", which is often interpreted as an embarrassing and awkward, if not perjorative concept.

> Analysis and evaluation are disjointed in the sense that various aspects of public policy and even various aspects of any one problem or problem area are analyzed at various points, with no apparent coordination and with the articulation of parts that ideally characterizes subdivision of topic in synoptic problem solving. (p.105)

Disjointed may also refer to the focus on remedial policies which are more accessible and adjustable, in opposition to the addressing of a more comprehensive set of goals and alternative policies, as in RDA. The concept of "disjointed" is quite fascinating.

> Disjointedness has its advantages--the virtues of its defects--chief among them the advantage of preserving a rich variety of impressions and insights that are liable to be 'co-ordinated' out of sight by hasty and inappropriate demands for a common plan of attack. There are circumstances to which no one plan is especially suited. (p.106)

The elements of DIA illustrate the descriptive nature of this approach. It is an attempt to be empirical by establishing the patterns of behavior which are actually related to policy-making. This does present some conceptual difficulties, leaving a very loose tradition, theoretically speaking. The confirmation of a descriptive theory is,

generally, in principle a very difficult, if not impossible task. Empirical validation of descriptive theories can be demonstrated to be incorrect, but the actual confirmation of descriptive theories is possible only if all alternative theories are rejected. However, a large set of works which propose to be models, propositions, hypotheses, and theories or quaisi-theories have been developed. There is a great deal of overlap, redundancy, contradiction, and complementarity within this very loose set of studies which can be identified with DIA, a very disjointed and incremental grouping! Later we will attempt to identify the administrative tradition which can be related to DIA.

Obviously, the approach to policy-making and policy analysis as outlined above is not without difficulty. Although the impact of Lindblom's thesis has been undeniably strong, the reaction of proponents of RDA has been strong also. Dror, for example, emphasizes the derogatory nomenclature of "muddling through", as characteristic of DIA, and suggests that adoption of the model by decision-makers might tend to an underestimation of the impact of these actors. He notes that it is useful to point out the reservations regarding the impact of such actors, as Lindblom has done, but "these are insufficient to alter its main impact as an ideological reinforcement of the pro-inertia and anti-innovation forces." (Y. Dror, 1964, 55)

Though there is little argument regarding the validity of the empirical bases of DIA, the problem is how can such highly descriptive observations of real-life planning become prescriptions? Should descriptions even become prescriptions? Etzioni argues that "Decisions by consent among partisans without a society-wide regulatory center and

guiding institutions should not be viewed as the preferred approach to decision-making." (Etzioni, 1967, 387) First, the interests of the most powerful would be over-represented and the under-privileged or politically unorganized would be under-represented, due to the inevitable differentials of respective power positions and abilities to corner and utilize resources. Secondly, major or basic societal innovations would be neglected because of a major focus on the short run which is, of course, based on variations of past policies. "While an accumulation of small steps could lead to significant change, there is nothing in this approach to guide the accumulation; the steps may be circular... or dispersed...." (Peretz, 1967, 387) Boulding, a major spokesperson for general systems theory, proposes the same critique more graphically. In this model, "we do stagger through history like a drunk putting one disjointed incremental foot after another." (Boulding, 1964, 931)

As noted, a difficulty with DIA is how a descriptive model can become a prescriptive model. Although Lindblom anticipates this criticism, his justification is not satisfactory because although "Lindblom says that decision-makers will be successful when using his strategy, he neither indicates variables by which degrees of disjointed incrementalism could be identified, nor defines 'success' in decision-making." (A. Faludi, 1973, 153)

Another major critique also points out that Lindblom is against making choices of a fundamental kind, that is those choices which would affect the whole community or large parts of it, or which would result in substantial change. In fact, as noted above, he deliberately deletes this subset of situations from his analysis of policy-making (as is

implied in the name of the approach).

> Social fragmentation of analysis and evaluation, in his terms, means that analysis and evaluation in a democratic society takes place at a very large number of points. Each of the many different approaches is being taken simultaneously by more than one decision center.... In this case, whatever the direction the community as a whole takes, it cannot be the result of deliberate choice. Rather it is the resultant of the operation of various forces. (A. Faludi, 1973, 153)

Another expression of the difficulty of Lindblom's exclusion of specific categories of change from his analysis is seen in Etzioni's criticism that this is a methodological mistake. Although incremental decisions may greatly outnumber fundamental decisions, the significance of the later decisions is more critical for the society. He concludes the "significance for societal decision-making is not commensurate with their number." And, furthermore, "it is often the fundamental decisions which set the context for the numerous incremental ones."

> Although fundamental decisions are frequently "prepared" by incremental ones in order that the final decisions will initiate a less abrupt change, these decisions may still be considered relatively fundamental. The incremental steps which follow cannot be understood without them, and the preceding steps are useless unless they lead to fundamental decisions. (Etzioni, 1967, 397)

So that it is difficult to distinguish the relationship between incremental and fundamental or large changes. In fact, most incremental decisions are a breakdown or specification of fundamental decisions, or they anticipate large decisions. Also the accumulated impact of incremental decisions is possibly identifiable as relatively fundamental changes.

Another difficulty with DIA is that not all incremental decisions tend to be remedial, that is, small steps taken in the 'right direction' or to alter steps in the 'wrong direction'.

> If a decision-maker evaluates his incremental decisions and small steps, which he must do if he is to decide whether or not the direction is right, his judgment will be greatly affected by the evaluation criteria he applies. Here, again, we have to go outside the incrementalist model to ascertain the ways in which these criteria are set. (Etzioni,

A final difficulty which we will note has been implicit in the above criticisms of DIA. This is the charge of extreme conservatism. This is in relation to the direction of the change, shifts in power and wealth, speed of the change, and issues of change. Lindblom anticipates the charge. People may be encouraged to associate the strategy with conservative political attitudes, but the synoptic approach (RDA) may well seem more conservative than the strategy (DIA).

> Unlike the strategy (DIA), it (RDA) seems suited to taking a stand on fixed principles. That is, at least one reason why conservatives might be incluned to calim the synoptic approach for themselves. There are also reasons why progressively minded people might be inclined to assign the synoptic approach to them. Does not the synoptic approach encourage the assumption that every detail of an innovation ought to be shown to be theoretically adequate before a move is made. (p.108)

He continues to point out that DIA is neither conservative nor progressive. It specifies nothing about the direction or the speed of change. Its incrementalism only demands that time for consultation and negotiation be included in policy processes. Furthermore, since most policy issues are exploratory and even experimental, time is essential to inspect and evaluate the results of the sequential policy-making moves.

3. Summation

The discussion of these two approaches to policy-making has covered the major elements of each approach. These are summarized in the

following chart. As stated in the summaries, the major lines of the controversy between the approaches becomes more evident. These are particularly notable in the assumptions which are illustrative of each approach. The assumptions listed are not an exhaustive coverage of the assumptions which could be associated with each approach, but have been selected because they highlight the themes of the controversy.

In the rationalistic approach (RDA) decisions around policies are made by defining the goal, weighing alternative actions of achieving the goal, and choosing the best alternative according to criteria which have been established. There are 'marco-level' societal decision-makers who have the capability and capacity to control and implement societal policies. Information requirements are quite high, including a rather comprehensive knowledge of alternatives and consequences. Certainty is quite high, as is evidenced in the assumptions regarding the stability of environmental conditions which are either predictable or have little capability to disturb the policies which are designed.

In the incremental approach (DIA) sub-groups within the system hold different values, interests, and views of society. These interact in policy formation in a dynamic manner as evidenced in components of DIA in the summary chart. The approach is seen to be more realistic in light of the limitations of men and organizations. The term incremental most often refers to the movement from the status quo in a very conservative manner. However, it can also be used to describe the need to incorporate time and process for negotiation in policy-making as well as the incorporation of the reality that decisions are based on a knowledge of the present and judged against an understanding of that reality.

Disjointed refers to the extent to which policy formation, analysis and evaluation occurs at a large number of points and on several levels, many times simultaneously. Society does not have centralized decision-makers with high control over policies and actions. Society is an aggregate of individuals and groups in competition, an atomistic view of society, where small decisions taken with a view to individual advantage automatically result in developments which are to society's long-term advantage.

An understanding of the basic components and assumptions of RDA and DIA permits the identification of action which can be associated with each approach. This is suggested in the identification of typical behaviors which can be related to RDA and DIA. This will be examined in greater detail by exploring the administrative traditions with special relevance to RDA and DIA in the next section of this essay.

SUMMARY OF MAJOR ELEMENTS OF TWO APPROACHES TO POLICY-MAKING

	RATIONAL-DEDUCTIVE APPROACH (RDA)	DISJOINTED-INCREMENTAL APPROACH (DIA)
Components	Goal development--what is to be achieved. Statement of preferences--criteria for selection. Exposition of set of alternative actions. Test alternatives by preferences. Select the most rational alternative. Evaluate alternative achievement against the goal determined previously.	Marginal-dependent choice. Restricted variety of alternatives considered. Restricted number of consequences considered. Adjustment of objectives to policies. Reconstructive treatment of data. Serial analysis and evaluation. Remedial orientation of analysis and evaluation. Social fragmentation of analysis and evaluation.
Assumptions	The system is teleological, i.e., it is goal-seeking in its behavior. System is unitary in action and decisions. System is not only monolithic but also is autonomous. Problems are single, unitary, identifiable, and soluable. There is high degree of stability and certainty in relevant conditions. Nomic relations can be identified, and policy or action consequences can be predicted. Centralized control is possible.	Systems are basically pluralistic. System behaviors reflect the relative interests and strengths of its sub-groups. Policy-making is a series of steps requiring problem identification and re-identification. Problems and solutions are relative; problems and solutions are time and place specific. There is a high degree of instability and of uncertainty in relevant conditions. Control and influence is highly dispersed and fluid or shifting.
Critiques	Dominant alternatives are elusive. A diversity of interests must be addressed. Consequences are not know with high certainty. The process is too complex to identify all relevant variables. Control of the system is not possible. Changes over time are not accounted.	It is status-quo oriented, and creates power distortions. Descriptive study is possible, but not useful in a prescriptive sense for policy formation. Judgement of the appropriateness of the direction of policy decisions in not possible. It permits only small changes, not fundamental changes of significant natures.
Major characteristic	Normative: what organizations <u>should</u> do	Descriptive: what organizations <u>actually</u> do
Typical behavior	Optimizing behavior, emphasizing goal achievement efficiently and effectively.	Compromising behavior, negotiating between various interests and values to find acceptable action.

Figure 5

This figure summarizes major elements of the two approaches to policy-making as identified in the text.

IV. POLICY APPROACHES AND RELEVANT ADMINISTRATIVE TRADITIONS

This section of the essay addresses the administrative implications of the approaches to policy-making and policy analysis which have been identified and explored above. It is proposed that particular administrative traditions can be associated with each of these idealized approaches to policy-making. The linking of RDA and DIA to these administrative traditions is an attempt to further explore the consequences of the selection of either of these approaches. It is also an attempt to construct the lines of a controversy which exists between these approaches to policy-making. These administrative traditions, which have been judged relevant within the considerations of this essay, do not form coherent, distinct, evolutionary traditions as might be evidenced in systems of knowledge within the sphere of physical and natural sciences. The traditions are quite loosely bound and must be linked together in the form of a tradition through the argument presented in this essay. Therefore, an understanding of the essential characteristics of RDA and DIA were presented before this exploration of the administrative implications of the approaches. From an understanding of the basic elements and the critiques of the approaches, the administrative implications are based on the strengths, weaknesses, and emphases of the approaches.

* * * * * *

1. RDA and Relevant Administrative Tradition

Particular administrative traditions can be associated with each of the idealized approaches of policy-making. RDA can be seen to be associated with the administrative traditions which are involved with

the improvement of conceptions for decision-making and policy-making by broadening the role of logic and guided empirical research in these processes. There has been extreme importance attached to objectivity, i.e., detached, deliberately impersonal, empirically verifiable, and value-free analysis. The need for objectivity has its basis most directly in the more exact natural sciences, which many social sciences have used as a methodological model. The accepted methodology is one which rests on purely objective modes of relations between the observer and the object of observation. There is an impersonal relation which assumes that the observer has no impact on the observed. Consequently, personal judgment about values has been often deemed improper--i.e., unscientific--subjects within the sphere of this tradition. The central claim of RDA in policy sciences has been their "asserted capacity to enlarge the role of explicit, logical reasoning, of empirical knowledge, and of consensual discourse in realms of decision-making otherwise dominated by supposedly less trustworthy sources of choice." (A. Dunsire, 1973, 88)

RDA has been called normative in all of its forms. (Bauer & Gergen, 1968, ch.2) This means that it establishes an ideal pattern of behavior or guidelines for that behavior. These are then generalized for a wide variety of organizations and situations. An extensive literature in the field of administration can then be related to RDA.

The most obvious administrative implications of this approach are seen in a strong emphasis on imperative administration. Imperative administration is based on the premise that centralization and control are essential for the success of policies, plans, and administrations.

The administrative tradition related to RDA can be traced to the developments in administration at the beginning of this century. The methodological components of RDA existed clearly in the 1930's and can be illustrated by the writers who represent the tradition of scientific management in administration.

The title 'Father of Scientific Management' is usually bestowed on Frederick Taylor, an engineer who wrote several seminal papers on time and motion study and their relationship to wage systems. In 1911, Taylor published a book entitled Principles and Methods of Scientific Management. His stated intentions in that book were:

> FIRST. To point out, through a series of simple illustrations, the great loss which the whole country is suffering through inefficiency in almost all of our daily acts.
> SECOND. To try to convince the reader that the remedy for this inefficiency lies in systematic management, rather than in searching for some unusual or extraordinary man.
> THIRD. To prove that the best management is a true science, resting upon clearly defined laws, rules, and principles, as a foundation. And further to show that the fundamental principles of scientific management are applicable to all kinds of human activities, from our simplest individual acts to the work of our great corporations, which call for the most elaborate cooperation.
>
> One of the important objects of this paper is to convince its readers that every single act of every workman can be reduced to a science. (F. W. Taylor, 1911, 5-6)

Efficiency and principles became the guidelines of administration. Administrative study was seen as the development of a science. It was, in fact, asserted that the principles of scientific management were "applicable to all businesses, all departments of all businesses." (A. Dunsire, 1973, 90) Administrative science was about the work of replacing intuition and hunches by observation, measurement, and the development of nomic relationships or principles. Traditional methods

and practices of administration were to be replaced by calculation and other rational methods of scientific management.

Though scientific management, with Taylor, began at the mechanical and routine operational levels, it was soon extended to total organizations. Scientific management principles were judged relevant for enterprises as a whole, including organizational leadership and policy. Scientific management principles were also not limited to the business enterprises, but were considered relevant for all organizations.

As administrative texts began to accept the underlying concepts of scientific management, it has appeared that a primary premise was the dichotomy of politics and administration. This was seen as both evident--i.e., existing in reality--and desirable. Administration was a 'self-contained' world with its own values, rules, and methods. (A. Dunsire, 1973, ch.6) Organization theory was stated in scientific management terms, i.e., it was largely seen as a problem in organization technology. Basic principles were developed, such as: (1) the necessity of hierarchy or scalar process; (2) the uses of staff agencies; (3) a limited span of control; and (4) subdivision of work by such scientific principles as purpose, process, place, or clientele. The budget was emphasized as an instrument of rationality, co-ordination, planning, and control. Personnel management was stressed as another element of rationality, i.e., jobs were to be described scientifically and clearly, employees were to be rationally selected, paid and advanced. It can be seen that concepts and principles such as these are the basis of the association of Weberian traditional perspectives on bureaucracy also with the administrative tradition relevant to RDA.

The work in scientific management was further promoted by Fayol, Gulick, and Urwick. Fayol, for example, related administrative theory to the state. He states examples of Belgium and France to illustrate the impact of scientific management in bringing about the 'inspired reorganization' of state agencies. (H. Fayol, 1937, 101-114) Other studies have illustrated the impacts in England, USA, Germany, etc. And more recently, there has been an interest in the relevance of similar principles to optimizing the development paths of less development countries.

Fayol states the relevance of scientific management to the state:

> The structure of high command in the public service has the same general aspect in all modern states; undifferent names we find almost everywhere a Prime Minister, ministers and directors.
>
> The Prime Minister has authority over the entire governmental enterprise. It is his duty to conduct the enterprise towards its objective by endeavoring to make the best possible use of the resources at his disposal.
>
> .... Let us see what is the principle role of the high command in the public service. In a great enterprise like the state, this role is essentially administrative; it consists in preparing the operations of the various governmental services, in seeing that they are carried out and in watching the results. To prepare the operations is to plan and organize; to see that they are carried out is to command and co-ordinate; to watch the results is to control. (H. Fayol, 1937, 102)

Fayol summarizes the belief system of scientific management by saying that administrative science embraces "enterprises of every size and description, of every form and every purpose. All undertakings require planning, organization, command, coordination, and control, and in order to function properly, all must observe the same general principles. We are no longer confronted with several administrative

sciences but with one alone, which can be applied equally to public and to private affairs and whose principal elements are today summarized in what we term the Administrative Theory." (H. Fayol, 1937, 101)

Urwick, another major spokesperson of scientific management, sees organization as basically a technical problem. As a technical problem, there are principles which can be applied universally for the solution of the problems.

> ...there are principles which can be arrived at inductively from the study of human experience of organization, which should govern arrangements for human association of any kind. These principles can be studies as a technical question, irrespective of the purpose of the enterprise, the personnel composing it, or any constitutional, political, or social theory underlying its creation. They are concerned with the method of subdividing and allocating to individuals all the various activities, duties and responsibilities essential to the purpose contemplated, the correlation of these activities and the continuous control of the work of individuals so as to secure the most economical and the most effective realization of the purpose. (L. Urwick, 1937, 49)

Urwick outlines these principles as including the following. First, Coordination is a principle which expresses the basis of all other principles. It involves the division of all organizational activities by vertical and horizontal lines into tasks. "Such subdivision is usually either 'serial'--the responsibilities follow each other in process, 'unitary'--the responsibilities are defined by areas or objects, or 'functional'--the responsibilities are distinguished by kinds or subjects. But where any large numbers are concerned, work must also be divided up by horizontal lines into different levels of authority and responsibility." (L. Urwick, 1937, 49)

The sub-principles which were developed relevant to this latter division and co-ordination included the Scalar Process, emphasizing the need to have "clear lines of authority running from the top into every corner of the undertaking and that the responsibility of sub-ordinates exercising delegated authority should be precisely defined." (p.51)

From this follows the principle of Specialization, which is a "function of the great advances in applied scientific knowledge, the amount and complexity of specialized skill required in connection with every activity and the increased amount of authority and responsibility along with tasks in increasingly complex human organizations." (p.51)

Span of Control is another important principle which asserts that "no human brain should attempt to supervise directly more than five, or at the most, six other individuals whose work is interrelated." (p.52) Neglect of the limitations imposed by a 'natural' span of control was seen to result in great problems, in fact, insoluble problems, in co-ordination.

Line and Staff systems of organization is a principle which assists the achievement of other principles in that it permits the delegation of authority to an immediately accountable staff for area coordination. It is an extension of the principle of specialization, but permits the functioning of control and coordination within the limitations of span of control.

Most of the work of scientific management focused on the formal or structural aspects of organizations. It maintained a clear distinction between the office and the person who occupies the office. The central

set of propositions which were developed included these, which illustrate the relationship to RDA: (1) Given the general purpose of an organization, it will be possible to (2) identify the basic functions necessary for the realization of that purpose (e.g., production, commercial, etc.). When basic functions have been identified, it is then (3) necessary to break down broad categories into specific subcategories. (4) Subcategories must further be broken into tasks. (5) Tasks should then be grouped in such a way so as to have maximum output or production for minimum cost. (N. Mouzelis, 1967, ch.4)

> The solution...lies in the discovery of a set of principles, which when correctly applied to the particular situation will prove invaluable guides to the construction of a rational-efficient framework for management. Now, in order to discover such principles, a basic precondition is a clear idea of the structural features common to all existing organizations. In other words, the formation of principles is preceded by a descriptive and conceptual analysis of how an organization is structured.
>
> For such an analysis the main concepts generally used are those of authority and function. Vertically, the organization structure is conceived as a hierarchy which is created by the delegation of authority and responsibility from the top to the bottom of the organization. Horizontally, the differentiation is analyzed in terms of functions. (N. Mouzelis, 1967, 89)

Gulick developed the POSDCORB formula of administration. POSDCORB utilizes the basic administrative components discussed above, and has become nearly synonymous with scientific management--Planning, Organizing, Staffing, Directing, Coordinating, Reporting, and Budgeting.

Throughout the development and explication of these principles of scientific management, Control and Centralization remained essential for the success of rationality in administration. Gulick, for example, emphasized centralized direction and common purpose. Rational coordin-

ation was based on these two basic premises. Other authors have identified such principles as command, routines, group identification and cooperation. (e.g., V. Thompson, 1961) However, it can be seen that command and routines correspond to central management (and implicitly, standardized rules), while group identification and co-operation are forms of interdependency based on common goals or purposes.

Statements which are typical of this tradition can be illustrated by the following:

> If a government is ever to be coordinated, it must be coordinated in the minds of the people who authorize it and those who operate it, from the top to the bottom of the structure.
>
> Human society, therefore, requires a conscious control and manipulation of the various equilibria which exist in it. There must be an organizing centre within a given field of social vitalities. This centre must arbitrate conflicts from a more impartial perspective than is available to any party of a given conflict.

Though the administrative tradition relevant to RDA can be traced back to the earlier part of this century, this does not imply that its impact was restricted to that time. In fact, its greatest development may have been largely a result of some spectacular successes which were achieved during World War II when the solution of some well-defined tactical problems led to governmental recognition of the values of both operations research and systems analysis. (L. Tribe, 1972, 68) Arising from these successes, an attempt was made to keep together some of the operations research terms by a joint contract between the US Air Force and Douglas Aircraft which set up a civilian research group to work on military problems. By 1948, this group had split from

Douglas and had re-organized as the non-profit RAND Corporation. By the 1950's RAND had come to emphasize what is now called systems analysis. Systems analysis focused "on problems to be rigorously maximized. Systems analysis does not abandon quantitative techniques altogether, but reserves their use for selected aspects of each problem; its practitioners see it as an attempt to apply systematic, common-sense reasoning to the structuring of complex decision situations." (L. Tribe, 1972, 68)

Policy analysis as developed during this period was directed toward the solution of problems by identifying clearly defined objectives and the consequential selection, through systematic and rational analysis, of appropriate and maximizing solutions. There was a domination of operations research and systems analysis by economists. Increasingly, economic modes of logic, which included quantitative and statistical techniques, were adapted and applied to problems which had traditionally seemed to be very uneconomic problems.

Throughout these developments, there was an increasing sophistication of the principles and techniques which can be related to RDA policy-making or those forms of decision-making designed to optimize and maximize. The applicability of the techniques, methods and approaches to problem-solving and policy-making seemed to expand rapidly through experience and theoretical developments. A brief acquaintance with the relevant literature would highlight the work of von Neumann and Morgenstern, the development of decision analysis and the decision tree, cost-benefit analysis and time-discounting methods, linear programming and objective function maximization and minimization.

Increasingly, there was an application of these approaches to policy-making and decision-making throughout business and government. In government, the earliest applications were in the Defense Department, but the practices were soon to spread throughout the federal government.

In all the sophistications, the fundamentally economic approach was maintained, as well as the premise that principles could be developed. That is to say that the approaches retained much of the quantitative emphasis and mathematical rigor of early operations research, along with a perspective of structuring situations based on the terms of the traditional economic models of reality, and the pervasive concept that methods and some principles could be developed and applied universally--or nearly so.

Success in the utilization of this approach, as achieved through effective coordination and control of available resources while applying established rules and procedures to specific forms of information to the evaluation of alternative selection, has had a large impact on the areas of administration, planning, and policy-making. This is evidenced in recent decades by the influences of general systems approaches, the attention to planning models on the national, regional and sub-regional levels--both in the US and abroad, the policies of supra-national organizations on loans and evaluation policies, and the organizations and re-organizations of private and public enterprises to find more rational, efficient, and effective forms of organization and administration.

A specific example of the impact which RDA has had recently in policy-making is the development of PPBS as an 'inspirational' organization principle designed to solve difficulties and problems of accountability, rationality, decision-making and administration. PPBS is the acronym for Planning Programming and Budgeting System. It has been suggested that PPBS is a technique which provides assistance in "input-output-effect-alternative analysis." (B. Gross, 1969, 114) The actual definition of PPBS is a source of confusion and disagreement, but in the tradition of other RDA relevant technologies and approaches, it attempts to clarify and link long-term and short-term objectives with alternative policies and strategies. It then evaluates these in terms of effectiveness and efficiency to provide the basis for ultimate policy choices. Originally it was seen as a very significant "managerial innovation", as a "technical breakthrough", as the "complete integration of policy-making and budgeting and implementation". (B. Gross, 1969, 111-137) It was soon apparent, however, that PPBS was less of a technique and more of an idealogy, a spirit, an approach, which could incorporate a number of specific techniques and technologies in different combinations for the same purposes. (B. Gross, 1969, 116)

The purpose of PPBS was to coherently combine into an aggregated process several historical phases of policy-making controversies. The controversy focused on the phases of policy-making and budgeting, implementation and evaluation includes aspects of: (1) input costs and budget cycles; (2) the specific activities on which money is spent; (3) the economic effects of total public spending; (4) the effects of specific programs and alternative paths toward the same or improved

objectives; and (5) control over decisions regarding spending and program alternatives. Concerns with these phases has often been associated with the need for improvements in public management, and is often oriented toward economy, efficiency, effectiveness, the general welfare and prosperity. In each phase, the relevant techniques are often justified by explicit theoretical considerations and spell out format prescriptions which can be used in bureaucratic and political competitions for scarce resources. The attention to the techniques and phases was drawn by the gap between the prescribed practice and the actual practice which is often quite large and which implies a loss of control and coordination capabilities.

PPBS was seen as a breakthrough which would reduce this gap between prescription and reality. It proposed specific analytic capabilities, specialized information cycles, and concepts on which pertinent information should be based. These concepts relate to: (1) inputs and their costs; (2) outputs (end products and services); (3) effects (benefits or disbenefits); and (4) alternatives. (B. Gross, 1969, 117) PPBS does provide the basis for both quantitative measurements and for qualitative information. Substantive content is provided for by the inclusion of short-term and long-term goal-oriented behavior, as seen in the use of concepts and terms such as objectives, plans and programs. Parameters of policies are identified and evaluation systems are initiated. The major emphasis is on the power of analysis to provide a consensual basis for major policy decisions.

The enthusiasm which PPBS invoked initially is seen in a speech by President Johnson when he introduced the initiation of PPBS throughout the entire government. In the early 1960's McNamara had made such analysis a critical factor in the decision and policy-making processes in the Department of Defense. At the height of its success in DOD, the President was influenced to introduce it in all federal departments and agencies.

> This morning I have just concluded a breakfast meeting with the Cabinet and the heads of Federal agencies and I am asking each of them to immediately begin to introduce a very new and very revolutionary system of planning and programming and budgeting throughout the vast Federal Government, so that through the tools of modern management the full promise of a finer life can be brought to each American at the lowest possible cost.
>
> Under this new system each Cabinet and agency head will set up a very special staff of experts who, using the most modern method of program analysis, will define the goals of their department for the coming year. And once these goals are established this system will permit us to find the most effective and the least costly alternative to achieving American goals.
>
> This program is designed to achieve three major objectives: it will help us to find new ways to do jobs faster, to do jobs better, and to do jobs less expensively. It will insure a much sounder judgment through more accurate information, pinpointing those things that we ought to do more, spotlighting those things that we ought to do less. It will make our decision-making process as up-to-date, I think, as our space-exploring programs.

PPBS exemplifies this tradition. It attempts to be neutral and objective. It separates administration from political realms, characteristic as well of the Wilsonian approach to administration. It attempts to provide 'hard' evidence as a basis for decision-making and as a basis for improving policy-making processes. Analysis is the basis for eliminating the gap between the normative or prescriptive policies

which are developed throughout the policy-making processes and the nature of reality through the implementation of the policies. The assumptions of the necessity of effective control and coordination of resources, according to established rules and procedures, form the basis for successful administration, and are continually emphasized in the RDA approach to policy-making and administration.

The administrative tradition relevant to RDA supposes the value neutrality of the centralized policy and decision makers. It thereby attempts to effectively separate fact and value in administrative processes. It implies a specific model of cognitive activity, i.e., a form of rationality. Rationality is tested by the criteria of deductive logic and internal consistency. The scientific and theoretical tradition is one adopted from the logical empiricists, and invariably has an impact on the knowledge and the forms of knowledge which will be utilized in policy-making. (W. Dunn, 1974, 86) Organization and administration are characterized by purposive and rational action, goal-oriented behavior. Processes and decisions are guided by technical and strategic rules derived from empirical knowledge and deduced decision procedures. These processes and techniques permit the verifiable or falsifiable prediction regarding physical and social events. The tradition assumes that choice essentially takes place in a closed system and that it is possible to have sufficient control over all the significant variables. It also makes some assumptions regarding the extent to which the system acts in unity, that is, the extent to which the system has a single set of preferences. Demands are also made on

knowledge, requiring a reasonably full range of alternatives and consequences. The RDA tradition proceeds as if choice can be made according to established criteria which are rationally determined and understood, and that it is the intention (and practice) to select according to rational, empirical, and analytic frameworks as developed. Further, it is assumed that the basis of decision is the rational calculation of opportunity, preference, and capacity.

Dimock summarizes this approach:

> First, there are always the problem and the issues. Second, there are the facts and analyses that need to be applied to the issues. Third, there is the setting forth of alternatives and the pros and cons applicable to each possible solution--all this in light of larger institutional goals and objectives. Fourth, there is the decision proper, which depends upon choosing among alternatives.... (M. Dimock, 1958, 140)

Throughout the RDA tradition, the theme of imperative administration prevails. Autonomy is assumed. Control and centralization hold high administrative priorities. Policy-making is portrayed as rational, goal-seeking behavior. Policy-making and administration is a linear progression from goals to policy to action. As we shall see in the following section, this stands in distinct contrast to the administrative tradition which can be constructed around DIA.

2. DIA AND RELEVANT ADMINISTRATIVE TRADITION

In exploring the relevant administrative tradition associated with DIA it is apparent that the tradition is not as well developed as that associated with RDA. It is not as coherent, nor as historically consistent. However, as seen in the following argument, it is the proposition of this essay that there is a loose tradition which can be related to

DIA. This loose tradition is an illustration of the basic characteristics of DIA and suggest the administrative implications of this approach to policy-making.

The tradition which can be associated with DIA has been classified basically as descriptive administrative theory, i.e., concerned with the behavior of organizations and emphasizing the processes of administration as well as the product of administrative processes in establishing the foundations of an administrative tradition. (Bauer & Gergen, 1968, ch.3) Although the tradition is loose, it is possible to identify several central themes and the literature which illustrates the administrative implications of the DIA tradition.

The primary characteristic of this administrative tradition as constructed for this essay is the preservation of the sense of complexity in policy-making processes. Policy-making is not the monolithic consideration of the best alternative for achieving a single preferred goal. That is, the policy-making body does not act in unity. Clearly, this is a premise which contradicts a basic assumption of the RDA tradition and is drawn from critiques of RDA. Policy-making is the interaction of many groups and interests in a complex process of adjustment and change. No single set of values and preferences dominates, except in very temporary or unusual circumstances. Policy-making is a process of confusions, uncertainties, discontinuities, conflicts and maneuvers of many persons or a number of groups involved in the policy-making. Each brings their own goals, motivations, values, and interests to that process, and even these may shift through time and have varying effects on the decisions. It is in this sense that

the importance of understanding the concept of incrementalism becomes crucial. As noted previously, it is not a derogatory or perjorative term. It is realistic and exciting. For the sake of this essay, three possible meanings are relevant: (1) Incrementalism as a process of decision-making which relies on precedent, both in aim and execution; (2) Incrementalism as a process by which policy emerges from a series of discrete decisions which involve no conscious intention to establish a policy; and (3) Incrementalism as a reference to the output of decisions as measured in relation to the status quo. The intent of this essay is more focused on the first two meanings, though a more common interpretation of DIA--especially among its critics--stresses the third. The third meaning is certainly relevant, but only in the context of a fuller understanding of DIA which includes the first and second definitions, so as to not narrow unnecessarily the interpretation of incrementalism.

An awareness of the importance of precedence suggests the Weberian images of rational bureaucracy and the bureaucratic prescription of regulations, rules, and definitions for every anticipated action. From this base, the administrative tradition constructed as relevant to DIA is built upon administrative themes drawn from studies of organizational and administrative behaviors. For the most part, they emphasize the priority of understanding what actually occurs in administration, rather than establishing priorities of what should be done, as seen in the RDA tradition. For the purposes of this essay, we have identified the themes which together form the basic structure of the DIA administrative tradition. These themes include problemistic search, bounded rationality,

exchange theory, informal organization, leadership and expertise roles, conflict and organizational rivalry. As seen, these form the basis for a fairly coherent administration tradition.

As noted above, organizational goals are not easily defined. The goals may be overt and covert, manifest and latent. Goal displacement and distortion may occur. There is goal succession, multiplication, and expansion. Goal priority may change, or goals may be in competition. This creates the special situation in which there is no one dominant goal or objective which becomes the main determinant of organizational policy-making. Policy-makers may spend much of their energies involved in 'problemistic search'. (R. Cyert & J. March, 1963) This implies that policy-making is more reactive than formative. Attention of policy-makers is diverted from problem to problem in a sort of fire-fighting manner. Attention may later return to the same issues as they reach critical levels problematic to the organization. Problematic search is motivated by the perception of problems by policy-makers, or as problems force their attention. Solutions are designed to avoid further uncertainty and to meet the organizational and coalition goals which are relevant to the particular problems. For the time, other problems and goals are given lower priority. Problems are usually solved to the extent to which the solutions permit the diversion of attention to other issues and problems which are subsequently arising. That is, there is "quasi-resolution" of the problems which reduce them from critical to manageable levels.

The search related to the specific problems is limited. It is impossible to explore all the alternatives and related information

necessary to meet the full criteria of objective rationality. This impossibility, a basic element of DIA, is the basis of the concept of "bounded rationality" as introduced in the work of Simon. (H. Simon, 1945) Simon proposes that (1) a limited number of alternatives are actually examined, (2) the knowledge and examination of the consequences of each alternative is fragmentary, and (3) the evaluation of consequences--particularly as related to the increasingly distant future--is imperfect. Therefore, the administrator must restructure and scale the problems and policies with which he must deal. First, all but the most evident relationships are ignored. Secondly, rather than maximize and optimize, the rational approach is to "satisfice". To satisfice means to find and choose the project or solution which will satisfy, at least, the minimum criteria which have been established. To satisfice is to adopt the solution from the first acceptable alternatives. At that point, the search of and for alternatives is terminated. Satisficing is a description of what actually occurs as well as the most feasible prescription for what should occur in administration and policy-making, according to the DIA tradition. Its rationality and feasibility is based on the given parameters of reality--as outlined above from the literature of Lindblom. The decisions are incremental in that they are based on the status quo and problems arising from that, they are compared to the status quo not an ideal, and they most often arise from precedent.

Simon summarizes satisficing as follows:

> The necessity for choice arises when more than one alternative courses of action present themselves to the individual. The differences among alternatives are reflected in terms of summary measures along those primary dimensions with which value is associated in the choice situation. An individual formulates his problem of choice in terms of finding an alternative that satisfies his level of aspiration along each dimension.... It is at the aspiration level that an expected outcome is deemed satisfactory and is accepted. (H. Simon, 1945, 68)

Bounded rationality also takes cognizance of that fact that it is not possible to establish all the guidelines necessary for making policy and decisions. Rather, only the most important guidelines are established. Within the guidelines, there is a zone in which there is latitude of decision entirely dependent on situational perceptions. The boundaries of this zone and the concept of bounded rationality are molded by bonds of loyalty, precedent, values, socialization, and experience. These contribute to the incremental nature of policy-making processes and decisions.

We have noted that there is a restricted view of the problem, of alternatives, and the "quasi-" nature of the solutions as designed into policies. Choice is not the rational process characteristic of RDA, but is a result of a sequential search for a satisficing alternative. A further note highlights the nature of the problems which are most frequently the realm of policy-making. The problems are those which require considerable judgment, which have high information requirements, which have considerable impact, which are not of a routine nature. That is to emphasize that policy decisions cannot be based usually on a comprehensive understanding of the problem and all alternatives. In

fact, the problem itself is not well-structured. The ill-structured nature of problems which policy-makers often address preclude solutions and methods of approach which are routine, obvious or well-defined. This fact further dramatizes the complexity of policy-making and accentuates tendencies for policy-making to be incremental in nature.

Incrementalism as seen in DIA policy-making is also characterized by the competition between various coalitions and groups within the organization. Various groupings bring their own sets of interests, values, and goals to the policy-making situation. Depending upon these values and interests in relation to the specific problem or set of problems being addressed, these groups may shift and regroup, or their sphere and degree of influence may shift. Resolutions of problems are based on movements from the status quo in the direction of particular interests and values. The policies that result are from the symmetrical coalitions and sub-coalitions which form in relation to specific problems and situations. Coalitions shift and overlap. And these shifting coalitions become critical determinants not only of policies, but of the particular problems which are judged to be critical in nature, and the perspective with which the problems and subsequent solutions and policies are approached. (Cyert & Marck, 1963)

Clearly, the reality of organizational rivalry is critical in understanding and working in policy-making. Organizational rivalry refers to the intra-organizational rivalry leading to conflict situations within organizations. (V. Thompson, 1961) The development of subgroups, coalitions, and consequently subgoals within organizations highlights the competition and conflict which must have resolution

within organizations. The development of subgoals also highlights the networks of interdependency within organizations. The interdependency is often illustrated in the negotiating and compromising processes which are designed to resolve difficulties which may result from imbalances of ability and authority, capacity and expectations, among other factors. Policy-making is a part of the processes of compromise and negotiation which form 'quasi-resolutions' for the conflict and competition which exists in organizations. Therefore, the disjointed and incremental nature of policy-making is again highlighted.

The existence of the shifting coalitions noted above is evidenced in the distinction between formal organization and informal organization. Formal organization is most often defined as the obvious structural characteristics of organizations, the lines of authority, the regulations, and has been the basic domain of RDA. It has been shown, however, that informal organization forms the base for communication and cohesion in the structures of the formal organization. Furthermore, informal organization functionally protects the individual's integrity while reflecting the aggregation of particular sets of values and interests or goals which may be considered critical at the time and in the situation. (C. Barnard, 1938, 117) It is the reciprocal relationship which all individuals have with the formal organization. Organization results from the modification of the action of the individual through control of or influence upon one of the categories of purposes, desires or goals of the individual and structures the alternatives external to the individual and available. But informal organization is a result

of the purposes, desires, interests, values and goals of individuals within the organization and becomes a modification of the action of the organization. The reciprocal relationships in organizations have been expressed in terms of an "exchange theory". On an individual basis, the exchange is operative in incentives which ensure persuasion and compliance. "Incentives represent the final residue of all conflicting forces in organization...." (C. Barnard, 1938, 158) Individuals and groups operate out of self-interest, simultaneous with their competition with each other and the total system. This tension produces a dynamic stability which results in the cooperative effort and which reflects, as seen in DIA above, the faith that the system will be able to produce consequences to the advantage of all members, in the long run. Policy-making incorporates and is incorporated in the exchange of reciprocal relations within the organization.

The reciprocal relationship also extends as characteristic of the relationship between organization and environment. The total environment is not controlled by the organization. Policy-making must therefore deal with a great deal of uncertainty when policies are environment-relevant. Policy-makers must see the organization as an "institution", that is, "a natural product of social needs and pressures --a responsive, adaptive organism." (P. Selznick, 1957, 5) Policy-making reflects the openness of the policy situation and the interdependency relations with the external environment of the organization. As policy-makers are limited in their control of external factors, they are pushed toward incremental policies which reflect acceptable and satisficing alternatives consistent with experience and external expectations.

> An institution has a history and interacts with the total social environment. When an enterprise begins to be more profoundly aware of dependence on outside forces, its very conception of itself may change.... (As) the enterprise gains the stability that comes with a secure source of support, an easy channel of communication, at the same time, it loses flexibility. The process of institutionality has set in. (P. Selznick, 1957, 7)

The flexibility which an organization loses is policy relevant because the policy-makers are no longer able to make radical or revolutionary change unless it is acceptable to and consistent with the external forces with which an interdependent relation has been established. Again, the disjointedness and incrementalism of policy-making is emphasized.

These concepts suggested above are critical in comparing the two approaches to policy-making. The formal organization is dependent on informal systems which are closer to spontaneous human behavior than the more rationally-oriented traditions suggest. The impact of groups and individuals is the essence of organizational relationships as well as the impact of organizations on individuals. Control and coordination have their reciprocal in that organizations, will in turn, be subordinated to personal and group egotism. The flow of influence is two-way and reversible. The RDA emphasis on control is modified by the existence and strengths of reciprocal influence. Further, the openness of the system is critical in policy-making. Organizations are not closed to their environments, nor in control of external forces. DIA drops the assumption that organizations can operate as closed systems with their own rationality dominating all policy and system action.

Control and influence in organizations is not always obvious and often not congruent with organizational structures. The validity and strength of informal organization, and its enormous impact on the distribution of power and organizational performance, is illustrated in a study called The Bureaucratic Phenomenon by Crozier. (M. Crozier, 1964) In two case studies of factories in France, Crozier found that certain groups within a factory had considerably more prestige and power than could be explained by their position or profession. Specifically, the mechanical and maintenance teams who were responsible for machine repair had strong influence on the attitudes in the shop, were given greater deference than many managers, and were able to exercise power through the performance of their responsibilities with varying degrees of speed, competence, and geniality. In fact, the shop's entire operations became dependent on the expertise of the mechanical and maintenance groups. This led to the observation that there are at least two kinds of power and influence evidenced in the organizations studied. First, there was the power of expertise, as evidenced by the maintenance groups, and second, there was the power which emerged to check their power. The second was seen in the solidarity of some groups of workers dependent on the expertise of the maintenance groups to enforce their desires and demands on this powerful group who was so influential in their working sphere.

> First, will evolve the power of an expert, i.e., the power an individual will have over the people affected by his actions through his ability to cope with a source of relevant uncertainty. Second, there will emerge the power necessary to check the power of the experts. (M. Crozier, 1964, 63)

The importance of uncertainty is emphasized in these two case studies. The uncertainty was basically the breakdown of machines, which could be overcome by the maintenance experts. Management had little influence over this uncertainty and eventually over the group which dealt with the uncertainty. The formal structure did not reflect the actual power and influences various groups actually had in the performance of organizational tasks and in establishing actual organizational policy.

As everyone in an organization tends to be an expert of some sort, even though it may be a very narrow expertise, the power relations which develop between members depend to a great deal on the extent to which any one can be substituted for someone else. This is evidenced in the case of the maintenance groups above. Further, power and influence in organizations is closely related to the degrees of certainty and uncertainty in tasks, activities, and policies.

The discussion of power and influence highlights the complex leadership situation which actually exists in most organizations. Power is not centralized to the extent that the formal organization would appear to reflect. It also follows that control and centralization are not as simple as may be assumed in the RDA tradition. The role of leadership in organizations, in the formal sense, is still crucial in the DIA tradition. Particularly, the responsibility of leadership to make 'critical decisions' is accentuated, for example, such critical decisions as the definition of organization mission or purpose. However, the responsibility of leadership may not be to specifically define

mission or purpose, but rather the responsibility to see that mission and purpose are defined. (P. Selznick, 1957)

Perhaps an unforseen tension which developed in the RDA tradition is illustrated by a discussion of the role of experts and consequent power distribution in organization. Experts are often seen as advisory groups, value neutral and technologically wise. However, technology is seldom value-neutral and experts are seldom interest-free. Expert roles become very powerful and influential in policy-making, exerting great deals of interest, biases, and values within policy-making processes. The RDA tradition would anticipate that technological decision criteria could replace the political arena of policy-making. Then rationality would displace competition, conflict, and disorder. But increasingly, the role of experts became that of political actors. This expectation of the role of experts, and its transformation from advisory to political involvement is discussed by Guy Benveniste in The Politics of Expertise. (1972)

> In recent decades, faith in rationality has dominated our notions of public and private administration.... This faith in rationality emerged unquestioned along with faith in modern technological development and economic growth. We believed that Western notions of progress and the use of science had become universal and the dominant mode of political thought, and that modern technological societies had become increasingly similar because they were all subject to the same universal technical constraints. This was to be an age of technocracy where reason and fundamental technical demands would somehow displace old-style politics and the confusion of competing idealogies.
>
> In many western countries, in all the socialists countries, and most developing nations, various forms of national, regional, or organizational planning were instituted. Everywhere the systems approach to problem-solving was proclaimed the new rule of the day. The systems approach with its call for rationality, measurements, accountability, and optimization

seemed so eminently logical that it was only surprising that it was not adopted spontaneously. Yet the call for planning implied a better and more coherent order beyond the realm of politics. (G. Benveniste, 1972, 7)

Throughout the study, Benveniste goes on to clarify the role which experts actually play in policy-making. He finds that it is quite different from the expectations which dominated the rational tradition evident in RDA. His purpose is to understand just how experts influence private and public policy, and he emerges with a perspective which emphasizes the limits of a technological advisory role while highlighting the dangers of excessive reliance on accountability and other forms of rationalization including efficiency and optimization. The experts must, and do, play a role which combines technical dimensions with political dimensions. It is maintained that experts cannot claim, from experience and the exploration of studies, to be value-free and neutral in relation to judgment and political commitment. Expertise is, in fact, a form of political action. Experts who would be effective must relinquish the belief that they are only responsible for a narrow spectrum of technical knowledge. Technical knowledges have implicit values, interests, assumptions, and world-views. Experts must assume their political responsibility, or at least, recognize the reality that otherwise they become the agents of "bureautratic sterility", that is, they become tools which will be used for the values of a spectrum of policy-makers. (G. Benveniste, 1972, 62-63) For example, planners not only allocate resources, they are resources. And the resource they represent is neither value-free, nor power-neutral.

This thesis represents a statement that cannot be easily dismissed. Social realities, based on observations of experiences of planning and policy-making in recent decades, and with special emphasis on the development decade of the '60's, illustrates that experts are political agents, wielders of power in an arena of competition and compromise, which it was thought—as seen in the RDA tradition--they would displace.

The themes of the administrative tradition relevant to DIA have now become more clear. The increased emphasis on the role of values, the relations of individuals to each other and to the organization, the dominance of sub-groupings, the conflicting interests and goals, the competition for power, the importance of informal structures for the maintenance and the performance of organizations are central to these traditions.

The contrast to the traditions associated with RDA also becomes more clear. For example, organizational diagnosis in RDA would (1) break the total operation into simple component parts and tasks, (2) develop the best way to carry out each component part, (3) hire persons with technical aptitudes and skills to perform tasks, (4) train persons for specific and particular tasks, (5) supervise the performance of tasks according to specified procedures, and (6) evaluate by universal criteria. In contrast, we see in the DIA tradition (1) leadership which is functionally oriented, (2) technological complexity which requires team rather than individual emphasis and approaches, (3) openness of interaction with full communication throughout the organization, (4) control that is dispersed, not centralized, with critical decisions being made throughout the organization, (5) performance

goals and goal setting which is dispersed and dependent on the tapping of the full range of motivations of individuals and groups, and (6) more comprehensive and complex participation in decision and policy-making processes with the technological and technical aspects representing particular sets of interests and values in those processes.

The DIA tradition stresses the ability of organizations to change and learn, both negatively (what not to do) and positively (what to do). Organizations learn through the revision of aspirations, objectives, decision rules, behavior models, etc. (Cyert & March, 1963, 25-28) Organizational learning is crucial to organizational performance and survival, more critical than the application of particular methods, techniques, or solutions to the problems which are encountered. Based on the premise of organizational learning, organizational development comes through diagnosis, intervention, training, and growth which can be utilized to improve the climate and health of organizations, which can creatively channel the tensions of organizational life into self-defined changes for organizational effectiveness and vitality. (R. Lickert, 1964)

The best examples of studies which explicitly use disjointed-incrementalism as a framework for research and analysis are the studies of budgetary processes in the USA and in developing nations. (A. Wildavsky, 1964 & N. Caiden & A. Wildavsky, 1973) Both of these studies conclude that budgetary processes tend to be incremental, satisficing, fair share (compromises in budget distributions among competing groups according to estimates of program needs with increases or decreases based on proportional bases), and base oriented (calculations based on previous budgets as initial points for establishing new budgets). Within the processes,

agencies are in competition and espouse variant goals. The government does not act as a unitary decision unit, and is unable to control the dynamics of policy-making relevant to the budgetary processes. The government does not act as a unitary decision unit. The central administrations must coordinate through the resolution and compromise of tensions and conflicts. A major task is that of clarification and negotiation, rather than rational decision-making according to established policies. The issues revolve less around achieving national objectives and more around agency or subnational objectives.

The studies particularly emphasize the failure of planners and policy-makers associated with the RDA tradition to transform the processes of policy-making into the rational processes which are characteristic of RDA, i.e., establishing goals and finding optimal means to achieve these goals.

> Between thought and action...there is a fearful symmetry. Experience reveals a convergent evolution. Confronting a similar environment, theorists and practitioners react along similar lines. Starting out to master the complex conditions ...(they) end up submitting to them. They surrender to the problems by becoming another embodiment of them. Finance ministeries and spending departments play a constant sum game in which stability for one can only be bought at the expense of security for the other. They end up playing a minus-sum game in which, whatever their momentary advantage, the government is left worse off than it was at the start. Private virtues, to reverse Mandeville, become public vices. Planners recapitulate the syndrome, beginning by trying to transform their environment and ending by being absorbed into it. They become part of the problem instead of part of the solution. (Caiden & Wildavsky, 1973, 10)

The administrative tradition which can be associated with DIA can be identified. Successful administration in this approach is based on the capacities of administration to coordinate the various groupings which control resources, to become a vehicle for the expression of variant

SUMMARY OF ADMINISTRATIVE TRADITIONS RELEVANT TO RDA AND DIA

	RDA	DIA
Methodological Model	Normative: Establishes an ideal pattern of behavior for administration. Emphasizes the achievement of system goals, i.e., the result or product of administration.	Descriptive: Concerned with the actual behavior of organizations. Emphasizes administrative processes rather than primarily system goals or administrative products.
Administrative Model	Imperative administration Bases policies and practices on a single set of values.	Interactive administration Bases policies and practices on the interaction of many competing sets of values.
Administrative Success	Development of capability for centralization and control of the system's resources.	Development of capability to respond to problems of critical levels and motivate sub-groups toward resolution.
Administrative Components	Administrative Principles and Organizational Technology: Scalar Process Staff and Line Organization Span of Control Work Specialization by Purpose, process, place, task, or clientele	Problemistic Search; Bounded Rationality; Informal Organization; Leadership and functional roles; Organizational rivalry and conflict; Quasi-resolution of problems.
Administrative Tools	Authority and regulations, Budget, and preference criteria related to system goals.	Persuasion, normative incentives for co-optation and cooperation, and dependence on precedence.
Administrative Coordination	Division of tasks to achieve system purposes.	Formation of coalitions around issues for motivation in problem solution.
Administrative Goal	Efficiency and optimization in achieving system purposes in a maximizing manner.	System maintenance and stability while satisficing in achieving a configuration of goals within the system.
Administrative Cycle	Goal Establishment, Planning, Organizing, Directing, Supervising, Reporting, and Evaluating achievement. Linear toward problem solution and goal achievement	Problem definition, analysis, Coalition formation and adjustment of analysis and policy formulation, processes of reformulation, Quasi-resolution. Cyclical around issues, coalitions, and problems reaching critical levels.
Administrative Fields	Scientific Management Operations Research Systems Approaches Management Science Organizational Economics	Human Relations Organizational Dynamics Comparative Administration Sociology of Organizations Organizational Politics

Figure 6

This figure summarizes RDA and DIA administrative traditions in contradistinction to each other. This parallel treatment of administrative characteristics dramatizes

objectives, and to become a mechanism for the participation of complementary and conflicting values and interests in the policy-making processes. It requires the capacity to encourage compromise and negotiation, and the need to reformulate objectives and strategies as situations change. It requires frameworks for dealing with the inevitability of conflicts which will emerge from divergent objectives, interests, and strategies. It defines organizational learning as movement toward diagnosis and flexibility, rationality as feasibility, and the DIA tradition is dependent on the reciprocal nature of relations between ends and means, methods and goals, and groups within the organization. Much more relativistic and situational than the scientific management traditions of RDA, it requires extensive organizational learning, experiential and historical understanding, symbolic interaction and interpretation for effective and successful administration.

3. SUMMATION

The review of administrative traditions which can be associated with these approaches to policy-making illustrates the divergent natures of the two approaches. In this summation, it is not intended to trace back over the traditions as they have been earlier defined. It is intended to highlight the themes which run through each of the traditions and see how these themes illustrate the nature of the controversy between RDA and DIA.

The first theme deals with the perspectives on the natures of organizations. RDA makes assumptions on the extent to which the variables and relationships within organizations are few enough to comprehend and manipulate. In other words, RDA assumes that all relevant variables are known and comprehensible, by themselves and in relation to all other organiza-

tional variables. It also assumes that the relevant variables are under the control of the policy-makers and the organization. A basic theme of RDA administrative tradition is that the organization is a "determinate system", that is, the system is a closed system, or if closure is not complete, that the outside forces acting on it be predictable. (J. Thompson, 1967, 4)

DIA, on the other hand, emphasizes the extent to which organizations are not closed systems. Rather the organization is seen as a "natural system", that is, as a complexity, composed of a set of interdependent parts "which together make up a whole because each contributes something and receives something from the whole, which is interdependent with some larger environment." (J. Thompson, 1967, 6)

The first theme, the nature of organizations, is suggestive of the nature of society implicit in each approach. That is, RDA views society as being basically holistic with a basic unity of interests and purposes. Organizations act with this same unity, as a monolithic unit with sub-system complementarity in goal attainment. DIA views organizations and society as being characterized by diverse and competing interests and purposes. Subsystems are then in competition and conflict. The atomistic nature of organizations is emphasized.

The nature of organizations is determinant of the major concerns of the administrative traditions. Much of the literature associated with the RDA tradition has been generated as a product in the search for improved efficiency or performance. This includes the thrusts of scientific management (Taylor), administrative management (Gurlick & Urwick), bureaucracy (Weber), systems analysis and management science (PPBS).

The elements of organizations and of administration are chosen and evaluated according to their contribution to a unified organizational goal. Structures are then constructed which will effectively and efficiently bring about the attainment of that goal. As examples, the following illustrate the dominant concern with efficiency: (1) Scientific management focused primarily on production activities and employed economic efficiency as the priority criterion for establishing administrative policies and practices. It assumed that goals were known or obvious, tasks were repetitive and there were no difficulties outside the structural boundaries which were relevant to administration--e.g., resources could be obtained and output distributed. (2) Administrative management focused on structural relationships between production, personnel, supply, and other organizational unity and attempted to maximize efficiency by specializing tasks and grouping these into appropriate departments with lines of responsibility and authority clearly defined according to universal sets of principles such as span of control and delegation. As noted above, it was assumed that the organization was closed and there was minimal disturbance of organizational activity by outside forces. (3) Bureaucracy focused on staffing and structural requirements and maximized efficiency by the establishment of a universal set of procedures for the performance of organizational activities. (4) As noted above, the culmination of RDA in PPBS focused on the definition of goals and the measurement of performance by efficiency and effectiveness against the goal as defined.

In contrast, the DIA tradition emphasizes the extent to which survival is the primary goal of an organization. As a more natural

and political system, organizations are defined and redefined through evolutionary processes of interaction--interaction between subgroups within the organization and interaction between the organization or its subgroups and the environment. Central to this view of organizations as illustrated in DIA is the concept of homeostasis, or self-stabilization. That is, the concept that there is a spontaneous or natural governing of the necessary relationships among parts and activities of organizations which keeps the system viable in the face of disturbances stemming from the environment. (J. Thompson, 1967, 7) With a dominant concern of organizational survival, there is seen the relevance of the components of the DIA administrative tradition as outlined above: Problemistic search and quasi-resolution of problems to permit the continued existence of the organization until critical levels are again reached; the limited or bounded rationality applied to problem-solving and policy-making and the domination of consideration of interests and values in these processes; the extent of organizational rivalry and shifting coalitions around issues; the impact of informal organization on the formal organization and the distribution of power and influence in organizations. Briefly referring to several of these, it can be seen that the study of informal organization constitutes a distinct aspect of DIA, including variables not considered relevant or powerful in the RDA tradition--such as sentiments, cliques, social control via informal norms, status and status striving, etc. "Students of informal organization regard these variables not as random deviations or error, but as patterned, adaptive responses of human beings in problematic situations. They are the necessary spontaneous and functional develop-

ments which permit organizations to adapt and survive rather than residuals and obstacles to be overcome as in RDA. Secondly, the fact that organizations are not autonomous entities is highly emphasized in DIA. Policies and plans are vulnerable to internal conflict and competition as well as to the activities and forces of the environment. That is, the interdependency of organization and administration is stressed.

Interdependency or control constitutes another major theme in the literature of administrative traditions. DIA considers interdependency as inevitable, natural and adaptive or functional. RDA centers on the concept of controlling and emphasizes the need to expand control over all areas of uncertainty. This theme is closely related to the manners in which uncertainty is incorporated into the administrative traditions, as an integral part of the approach (DIA and administration) or as a constraint or a residual (RDA and administration). In treating uncertainty as a constraint or residual, RDA emphasizes the extent to which it is based on an ideal of knowledge embodied in the sciences of math and physics. That is, that it is possible to discover sets of universal rules by which actions and the consequences of actions can be predicted. As there are unified images of society, so there is consensus on the nature and utilization of knowledge. Explanation and prediction is possible, even to the extent that behavior is rule-governed. In contrast, DIA stresses the particularistic nature of knowledge--dependent on the situation, the dominant set of values, the historic setting and the interpretation of knowledge achieved through the interaction of various understandings of the nature of knowledge

and the possible consequences of policies and actions. DIA integrates uncertainty into its approach by acknowledging the lack of ability to explain and predict, but the necessity to explain and understand in a more relativistic sense.

In brief, the administrative traditions of RDA and DIA illustrate the extent to which the nature of policy is that of choice or compromise, respectively.

V. COMMENTS ON SYNTHESIS OF THE APPROACHES

The two approaches to policy-making examined above in this essay have been shown in contradistinction to one another. As presented the approaches of RDA and DIA are very distinct in their form and their administrative implications, but perhaps they do not form a clear dichotomy. The presentation here is intended to present the controversial nature of the two approaches, but it is not intended to present the positions of the approaches in the form of an either-or choice for policy-making or policy analysis. In fact, the two approaches may coexist, though it is the proposition of this essay that one approach will dominate, and this will be evident in the strategies and forms of administration. In the case of policy analysis, the study of the Cuban Missile Crisis cited above illustrates how the choice of particular approaches leads to particular strategies and conclusions.

RDA and DIA have been presented in ideal forms to make the distinctions between the approaches clear. However, the approaches are not necessarily mutually exclusive. Most likely, there will be, in reality of policy-making and analysis, some combination of the char-

acteristics of the approaches. Synthesis of DIA and RDA can be idealized in several forms: (1) RDA can be adapted to meet critiques of DIA; (2) DIA can be expanded to incorporate values of RDA; and (3) RDA and DIA can be incorporated as whole systems into a larger, more comprehensive approach to policy-making.

The first form of synthesis would suggest that it is possible for proponents of RDA to adapt their framework to include some of the reservations of their ideal which have been raised by DIA. A particular example of this form of analysis is seen in Dror's attempt to develop a 'policy science' which is distinct from RDA or systems analysis. His approach to policy science maintains its distinctively RDA characteristics, but is expanded to include variables such as institutional awareness, participation, inclusion of minority interests, adjustment for irrationality, and encounter or unexpected problems. (Dror, 19) These later components, however, seem to form more of an appendage to the basic RDA, rather than becoming integral elements of a new synthesis. The variables, which have been selected from the DIA critique of RDA, have been included in two ways--either as residuals or as constraints. As residuals, they have been relegated to honorable mention at the end of the consideration of the processes of policy-making, a form of postscript with minimal relation to the main body of his approach to policy-making and policy analysis. As constraints, they are articulated as critical process and environmental components which must be known before policy-making, but their relation to policy and policy-making is not explored or clarified in any manner. Both of these forms, residuals and constraints, amount to little more than a checklist which is provided

along with basic RDA policy-making. Though a number of studies have attempted to include the above variables in a rational manner in policy-making and policy analysis, it appears that it is not yet possible to be definitive, in a universal way suggested by the prescriptive nature of RDA, of the relationship of these variables to one another or to the whole of policy-making from the RDA perspective.

The second form of synthesis suggests that the proponents of DIA may adapt their framework to more explicitly incorporate the values of analytic selection processes which are typical of RDA. The most common form of this synthesis would be the subsumption of RDA technology and techniques through application to alternatives to be selected by experts. These experts would play neutral roles of advising and calculation in the policy-making processes. This synthesis has been seen to be realistic and acceptable in the design of many planning processes. But, as suggested above, experts who perform advisory roles in policy-making are not neutral, that is, they are not value-free or politically non-interested. Experts not only allocate resources, they are resources in policy-making. Advisory roles become political roles within the basic bargaining and decision processes of policy-making. (G. Benveniste, 1972) The synthesis is less of a synthesis in this instance. Techniques and technologies which may be adapted in advisory roles are not value free. They incorporate life styles, political values, and world views in approaches to problems. Even if not explicit, the values have an impact on the solutions to the problems, the consequences of policies, and the processes of policy-making. The techniques of RDA are no longer

conforming to the characteristics of RDA policy-making, rather, they become political and personalized tools which are used in the pursuit of particular interests and ends.

A third form of synthesis is that which attempts to incorporate both RDA and DIA as nearly whole systems into an expanded and comprehensive approach to policy-making. This synthesis is suggested in an approach which combines components of societal cybernetics with political mechanisms. Etzioni calls such an optimal synthesis the approach of 'mixed-scanning'. Mixed-scanning allows for the establishment of societal level policy and process in a monolithic manner characteristic of RDA while the incremental characteristics of DIA are manifest in the establishment of processes and decisions related to interpretation, innovation, and implementation of the societal policies.

> A more active approach to societal decision-making requires two sets of mechanisms: (a) high-order, fundamental policy-making processes which set basic directions; and (b) incremental processes which prepare for fundamental decisions and work them out after they have been reached. This is provided by mixed-scanning. (A. Etzioni, 1968, 283)

The combination of the two approaches in this manner suggests that they are useful at different levels of policy-making. This suggests also that possibly the approaches do not address the same problems. As noted above, RDA and DIA view organizations differently. RDA stresses the monolithic nature and the closed system rationality of organizations while DIA stresses the open system rationality and the pluralistic nature of organizations. Perhaps each may then be appropriate to different situations and different problems.

Two dimensions of problems may be suggested which permit the examination of problems to determine the appropriate policy-making approach for the particular situation. The first dimension deals with the degree of consensus regarding goals surrounding the problem and the set of values which the solution should address. The system may be monolithic or pluralistic. That is, there may be one set of values and goals or there may be many sets of values which in competition and conflict lead to the need for compromise, negotiation or domination among the sets of values.

The second dimension is the extent to which the consequences of particular policies and actions are known with certainty. This is more relevant for closed systems in which the knowledge of cause-effect relationships is fairly complete, but is also highlighting the extent to which there may be little accurate knowledge on the consequences of particular policies or actions. This framework is similar to that suggested as useful for assessing organizational action and designing organizational policy based on the degree to which organizations are rational systems (as characterized by monolithic action and closed system rationality) or natural systems (as characterized by pluralistic action and open-system rationality). (J. Thompson, 1967, ch.7)

These charted dimensions suggest four possible combinations of situations and problems in which policy might be designed. A cursory review of the boxes suggests a different form of synthesis for each box. In box I, RDA would dominate with very little impact from DIA. In box IV, DIA would dominate with very little impact from RDA. Boxes II and III, however, present cases where the synthesis of the approaches would

DIMENSIONS OF POLICY SITUATIONS

Knowledge of Consequences of Policy Action and Beliefs About Cause/Effect.

Degree of Consensus on Goals and Values	High Certainty	Low Certainty
Unified	I	II
Pluralistic	III	IV

This diagram suggests a framework for analyzing policy-situations. One dimension deals with the degree of consensus in the community or organization around the problem, the set of values which the problem resolution should address, and the goals of the policy and subsequent action. The other dimension of the policy situation is the extent to which it is possible to draw upon knowledge with certainty regarding the appropriateness of an action to a situation and the certainty regarding the cause-effect relationships or consequences of particular policies and actions.

In Box I, Consensus and Certainty are both high. In Box IV, both Consensus and Certainty are low. Boxes II and III represent policy situations in which either Certainty is high and Consensus is low, or the inverse.

Knowledge of Consequences of Policy Action and Beliefs About Cause/Effect

Degree of Consensus On Goals and Values	High Certainty	Low Certainty
Unified	RDA	synthesis
Pluralistic	synthesis	DIA

This diagram illustrates the transformation of policy approaches into particular policy situations. Boxes I and IV are rather pure forms of each approach. Boxes II and III represent situations where synthesis will occur. However, it is discussed in the text that the synthesis will not be true. One of the approaches will tend to be dominant. In this case, there will be a tendency to move in the direction of the dominant approach, creating an unstable synthesis.

The dominant approach can be determined by the role played by experts, among other methods of analysis. For example, if experts play primarily an advisory role, then the knowledge of Consequences would appear to have high certainty, the disagreement over values will have a tendency to be dominated by a rationalistic approach. If there is political roles of persuasion played by experts who disagree over beliefs about cause and effect, the tendency may be for incremental approaches to dominate. However, the cases are by no means clear and this diagram is primarily useful in identifying the extreme cases.

Figure 7

see the domination of one approach over the other, with the inclusion of the second approach to overcome the limitations of the first and dominant approach. The role of experts might suggest which approach would be dominant in each instance. For example, in box III, it might be possible for experts to play strictly an advisory role while decisions can be made on criteria of the desirability of various consequences, usually based on dominating value systems or on negotiated settlements reconciling value differences. But in box II, experts would play not only advisory roles, but also political roles, in the sense that there may be disagreement about the actual consequences of policy decisions so that any differences in prediction cannot be rationally settled, nor the correctness of the rationality of any approach determined. So, although it might be possible to suggest a synthesis of RDA and DIA by noting the different problems and situations to which they are relevant, there is still a wide range of problems and situations in which there is no apparent criteria for the appropriateness of the domination of one approach over the other. The synthesis may draw the best characteristics together, but it is more likely that any synthesis will be the overcoming of the limitations of an approach or the neglected aspects of one approach by the selective inclusion of aspects of the other approach. (C. Leys, 19

The argument that one of the approaches will be dominant, suggests that the approaches are seldom mutually exclusive, except in their ideal forms. As one approach is dominant, aspects of that, which have been critiqued, will be reinforced in some manner by the attempt to

incorporate those elements of the other approach which best address the weaknesses as critiqued. In RDA this means that the ignoral of political processes and the dismissal of the pluralistic nature of society evidenced in policy processes based on monolithic value and decision systems will be addressed by drawing those elements from DIA which are most relevant to these limitations. In DIA, this means that the tendency toward power distortions and the dominance of short-term considerations along with accentuated self-interest orientations will be offset by those characteristics of RDA which are most relevant to these weaknesses.

In short, it is unlikely that a balanced synthesis will occur. Though there are some compatible and complementary aspects of the two approaches, each does represent particular ways of thinking, particular ways of approaching the world, society, problems, and consequently, the solutions of problems. These differences have been explored in an examination of the administrative traditions which can be associated with RDA and DIA. Each approach has a distinct picture of the world, distinct assumptions about the underlying nature of the world, a distinct Weltanschauung. The presentation of alternative approaches to policy-making permits the questioning of the correctness of a particular Weltanschauung, and may bring about the integration of new aspects for the correction of some limitations which may be discovered. But the complete synthesis of two different world views, as seen in RDA and DIA, is unlikely. The nature of the controversy implicit in their world views makes synthesis nearly impossible and the differences of profile

between the administrative traditions of RDA and DIA the incompatible natures of these two approaches to policy-making.

SELECTED BIBLIOGRAPHY

Graham T. Allison, Conceptual Models and the Cuban Missile Crisis: Rational Policy, Organizational Process, and Bureaucratic Outcomes, Santa Monica, California: RAND Corporation, 1968, p. 3919.

Chester Barnard, The Functions of the Executive, Cambridge, Massachusetts: Harvard University Press, 1938.

Raymond A. Bauer & Kenneth J. Gergen, The Study of Policy Formation, New York, New York: The Free Press, 1968.

Guy Benveniste, The Politics of Expertise, Berkeley, California: The Glendessary Press, 1972.

Kenneth E. Boulding, "A Review of A STRATEGY OF DECISION", American Sociological Review, December 1967, pp. 385-392.

David Braybrooke & Charles E. Lindblom, A Strategy of Decision: Policy Evaluation as a Social Process, New York, New York: The Free Press, 1963.

Gerald E. Caiden, The Dynamics of Public Administration: Guidelines to Current Transformations in Theory and Practice, New York, New York: Holt, Rinehart and Winston, Inc., 1971.

Naomi Caiden & Aaron Wildavsky, Planning and Budgeting in Poor Countries, New York, New York: John Wiley & Sons, 1974.

C. W. Churchman, The Design of Inquiring Systems: Basic Concepts of Systems and Organizations, New York, New York: Basic Books, 1971.

C. W. Churchman, The Systems Approach, New York, New York: Dell Publishing Company, 1968.

M. Margaret Conway & Frank B. Feigert, Political Analysis: An Introduction, Boston, Massachusetts: Allyn and Bacon, Inc., 1972.

Michel Crozier, The Bureaucratic Phenomenon, Chicago, Illinois: University of Chicago Press, 1964.

Richard M. Cyert & James March, A Behavioral Theory of the Firm, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963.

Robert Dahl, Who Governs?, New Haven, Conneticut: Yale University Press, 1961.

Marshall Dimock, A Philosophy of Administration, New York, New York: Harper and Brothers, 1958.

Yehezkel Dror, "Muddling Through--'Science' or Inertia?", Public Administration Review, Vol. 24, 1964, pp. 150-158.

Yehezkel Dror, Public Policy-making Re-examined, San Francisco, California: Chandler Publishing Company, 1968.

Yehezkel Dror, From Management Sciences to Policy Sciences, Santa Monica, California: RAND Corporation, 1969.

Yehezkel Dror, A General Systems Approach to Uses of Behavioral Sciences for Better Policy-Making, Santa Monica, California: RAND Corporation, 1969, p. 4091.

Yehezkel Dror, Prolegomena To Policy Sciences, Santa Monica, California: RAND Corporation, 1970, p. 4283.

W. N. Dunn & Bahman Fozouni, The Politics of Paradigm Change: Toward the Mediation of Traditions in Contemporary Administrative Theory, Mimeo, University of Pittsburgh, Graduate School of Public and International Affairs, (Track No. X, Systems and Theories in Public Administration), 1974.

A. Dunsire, Administration: The Work and the Science, New York, New York: John Wiley & Sons, 1973.

Amitai Etzioni, Modern Organizations, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964.

Amitai Etzioni, "Mixed Scanning: A 'Third' Approach to Decision-Making" Public Administration Review, December, 1967, pp. 385-392.

Amitai Etzioni, The Active Society: A Theory of Societal and Political Processes, New York, New York: The Free Press, 1968.

Andreas Faludi, Planning Theory, Oxford, England: Pergammon Press, 1973.

Henri Fayol, "The Administrative Theory in the State" in L. Gulick & L. Urwick, Papers on the Science of Administration, New York, New York: Institute of Public Administration, 1937, pp. 101-114.

Bertram M. Gross, "The New Systems Budgeting", Public Administration Review, Vol. XXIX, No. 2 (March/April 1969), pp. 113-137.

L. Gulick & L. Urwick, Papers on the Science of Administration, New York, New York: Institute of Public Administration, 1937.

Harry Harding, Maoist Theories of Policy-Making and Organization: Lessons from the Cultural Revolution, Santa Monica, California: RAND Corporation, 1969, (R-487-PR)

Floyd Hunter, Community Power Structure, Chapel Hills, North Carolina: University of North Carolina Press, 1953.

Saul M. Katz, Guide to Modernizing Administration for National Development, Pittsburgh, Pennsylvania: University of Pittsburgh Press, 1965.

Harold D. Laswell & Danial Lerner, The Policy Sciences, Stanford, California: Stanford University Press, 1951.

Colin Leys, "The Analysis of Planning" in C. Leys (ed.) Politics and Change in Developing Countries, London, England: Cambridge at the University Press, 1969.

David A. Kolb, Irwin M. Rubin, & James M. McIntyre, Organizational Psychology: A Book of Readings, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1971.

Charles E. Lindblom, The Policy-Making Process, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968.

Myres McDougall & Harold Lasswell, "The Identification and Appraisal of Diverse Systems of Public Order", American Journal of International Law, Vol. 53, (1959), pp. 1-29.

Ian I. Mitroff & L. Vaughan Blankenship, "On the Methodology of the Holistic Experiment: An Approach to the Conceptualization of Large-Scale Social Experiments", Technological Forecasting and Social Change 4 (1973), pp. 338-353.

Nicos P. Mouzelis, Organization and Bureaucracy: An Analysis of Modern Theories, Chicago, Illinois: Aldine Publishing Company, 1967.

Hans Ozbekhan, "The Emerging Methodology of Planning" (mimeo) n.d.

Talcott Parsons, Structure and Process in Modern Societies, Glencoe, Illinois: The Free Press, 1960.

A. Ranney, Political Science and Public Policy, Chicago, Illinois: Markhan Publishing Company, 1968.

Martin Rein, Social Policy: Issues of Choice and Change, New York, New York: Random House, 1970.

Philip Selznik, Leadership and Administration, New York, New York: Harper & Row, Inc., 1957.

Herbert A. Simon, Models of Man, New York, New York: John Wiley, 1957.

Herbert A. Simon, Administrative Behavior, New York, New York: Macmillan, 1945.

F. W. Taylor, Principles and Methods of Scientific Management, New York, New York: Harper Brothers, 1911.

James D. Thompson, Organizations in Action: Social Science Bases of Administrative Theory, New York, New York: McGraw-Hill, Inc., 1967.

Victor A. Thompson, Modern Organization, New York, New York: Alfred A. Knopf, 1961.

Laurence H. Tribe, "Policy Science: Analysis or Ideology" Philosophy and Public Affairs, Vol. 2, No. 1 (Fall 1972), pp. 66-110.

L. Urwick, "Organization as a Technical Problem", in L. Gulick and L. Urwick (eds.) Papers on the Science of Administration, New York, New York: Institute of Public Administration, 1937.

Aaron Wildavsky, The Politics of the Budgetary Process, Boston, Massachusetts: Little, Brown and Company, 1964.

Walter Williams, Social Policy Research and Analysis: The Experience in Federal Social Agencies, New York, New York: American Elsevier, 1971.

This paper was prepared as an internal memorandum for use by the committee on evaluation described in the body of the report. Because only limited distribution was intended, normal footnoting was waived.

Humanistic Evaluation

Introduction

The word "evaluation" has become a shorthand, at least among social scientists and professionals, for a rather limited set of activities: evaluative research concerning social action programs. This essay attempts to redress the semantic imbalance, to discuss evaluation in its broadest cultural sense. What we mean by humanistic evaluation covers an immense range of activities, only a few of which are touched upon here. All we can hope to do is suggest, through a few examples, the scope of human intellectual activities which can be called evaluations. To that purpose, this essay has the following structure. The first section describes, from the perspectives of value theorists, the formal properties of an act of evaluation, without regard to the content or context of the act. The second section places this formal model in a well-documented context, literary criticism. The argument of this section is that of Lionel Trilling, who makes the point that criticism entails evaluative judgment at its core, but surrounds that judgment with critical actions toward other purposes, notably explication and communication. From this discussion of the evaluation of a well-defined and traditionally valued mode of communication, the literary arts, the discourse turns to the modern problems of mass communications research and the evaluation of mass culture. Given the breadth of mass communications enterprise and the centrality of mass communications to everyday life, the problems of mass culture evaluation are among the most profound questions of humanistic evaluation. There is no intent in this essay to provide a comprehensive overview of humanistic evaluation,

nor do we attempt to provide a series of tightly drawn themes. Rather, we project here a series of images, loosely related, as an instigation to further work.

Evaluation: A Formal Background

The natural starting point for a study of the contemporary social enterprise of evaluation is with the work of value theorists concerning the logic of valuation, preference and decision-making. Of course not all aspects of evaluation as it is practiced today will be encompassed by a formal modeling of evaluation, and some of the current practices thought of as evaluation will not qualify as such in light of a formal definition. Subsequent memoranda will attend to this. The purpose of this document is to present several models which together represent the set of intellective processes linking values, objects and decisions. The following discussion is drawn entirely from Nicholas Rescher's Introduction to Value Theory (1969), but it is by no means a comprehensive outline of that work.

Valuation and Evaluation

Evaluation is a value assessment: the determination of the relative extent to which something embodies a certain value. Because values are inherently benefit-oriented, evaluation is predominantly purposive. They are further generally limited in orientation, attending to one or a few values while disregarding others, and are usually undertaken in regard to a reference class, yielding an outcome of the form, "the benefits generally derived from items of this sort are present in the items at issue in an

unusually high (or low) degree." Evaluations may either indicate the extent to which a value is embodied in an object or the extent to which it is facilitated by the object.

Valuation is the systematic apparatus by means of which the realization of a value is assessed. Evaluation is the result of the application of a valuation to certain items in a specific case. Evaluation consists of bringing together (1) an object; (2) a valuation framework; and (3) a criterion of evaluation that embodies the standards in terms of which the place of the object in the framework is determined. It is a process of translating descriptive facts about the object into assertions of its having certain value features. In effect, it is a mode of classification, viz., as classification in point of value considerations.

Valuation may be purely comparative or it may be metric. This is limited in part by the value scales relative to which the valuation is conducted. Value scales may be ordinal or cardinal, depending on whether numerical representation is possible. In either instance they may be monopolar or bipolar. In the former, the absence of the value is a neutral attribute while in the latter both the positive and negatives ends of the scale have meanings different from neutrality. Further, value scales may or may not have meaningful termination points at either end of the scale. A purely comparative valuation proceeds according to the following paradigm. A set of objects x, y, z is introduced as the subject of the evaluation. To this set is introduced an ordering function such as >, where $x > y$ means that x outranks y relative to the value at issue. (The function $\geq$ may also be used, admitting the possibility of indifference.) The outcome is a statement such as $x > y > z$. The value of x is not fixed in an absolute sense; it is simply asserted as being greater than y or z. A metrized valuation

of the same set would demand the introduction of a measure function M such that M(x) represents the numerical M - quantity of the value residing in x. The ranking x > y > z then reflects the quantified assertion that M(x) > M(y) > M(z).

Rescher points out that neither comparative nor metric valuations make definitive statements concerning preference or utility. Relative to preference, the distinction that must be made is between objects which are preferred, implying a rational (or non-rational) act of selection, and objects which are preferable. Valuation treats only preferability relative to the specific value at issue.

Beyond the issue of preferability lie the problems of utility. Once a preferability statement has been formed, the question remains whether the most preferable is in fact independently useful or desirable. As an illustration Rescher provides the following schematic. On a valuation scale ranging from "awful" through "wonderful", the preferability statement x > y > z could be mapped in any number of ways, such as the following:

	awful	bad	neutral	good	wonderful
1.		z	y		x
2.	z	y	x		
3.				z y	x
4.	z		y	x	
5.			z		y x
6.		z		y x	

Clearly the statement x > y >z fails to provide important information. concerning absolute gradings and comparative assessments of the extent to which one is preferable to the other. A more useful scale can be constructed by asking the questions "How do you grade the x_i with respect to their individual merits (along a given scale such as above)?" and "Given that you prefer x to y, how would you describe the extent of this preference ("just a little", "quite a lot," etc.)?" Note that a fully metrized valuation provides a basis for answering the second question, in that M(x) >M(y) >M(z) can be expressed as ratios of the differences M(x) - M(y) - M(z). However, the first question can only be answered by developing a basis for mapping the metric scale onto some scale of utility, a process which demands further information but can be done without regard to specific items at issue. When this is done, we arrive, in Rescher's view, at evaluation "in its most robust and fully developed metric sense."

Evaluation and the Logic of Preference

Attempts to develop an exact formal theory of evaluation have centered on the concept of preference; hence in recent years much attention has been paid to the development of a formal logic of preference. (Rescher discusses at some length the major approaches that have been generated; it is beyond the scope of this memorandum to represent that discussion.) However, certain fundamental elements from which Rescher derives his systematic logic of preference demand attention.

Modes of goodness. The statement "it is a good thing that p" is ambiguous relative to the notion of "good." Rescher provides the following cases as examples:

	If it is the case that	then one is to get
A.	p	+$1
	not-p	(unspecified)
B.	p	+$1
	not-p	+$10

In case A, the occurrence of p is clearly a good thing; the basis of comparison is that between:

1. my situation before it eventuated that p was the case, and
2. my situation after the eventuation of p.

On the basis of such a comparison, one is able to attribute to p a "first-order" goodness.

In case B, however, a different basis of comparison is necessary. The first-order goodness of p is the same as in case A, but now the eventuation of p involves a $9 deprivation. In situations such as case B the appropriate basis of comparison is between:

2. My situation after the eventuation of p, and
3. my situation after the eventuation of not-p.

Such a comparison yields a "differential" goodness attributable to the item at issue. Clearly, a first-order goodness can be a differential badness, and conversely.

Modes of Preference

Corresponding to these modes of goodness are two modes of preference. These are illustrated in the following cases:

	If it is the case that	then one is to get
C.	p	+$10
	not-p	(unspecified)
	q	+$1
	not-q	(unspecified)
D.	p	+$2
	not-p	+$2
	q	+$1
	not-q	-$100

In case C, one is able to assert comfortably that p is preferable to q, making the judgement by comparing the extent of the first-order goodness of the two items. This constitutes a first-order preference. In case D, however, such a comparison is inadequate. Clearly p and not-p are preferable to q (and q to not-q) on the basis of first-order goodness. But by attending to differential goodness, one is quickly aware that:

1. When q is the case, one cannot fail to gain $3 regardless of whether p is or is not the case.

2. When p is the case, one either gains $3 or loses $98, depending on whether q is or is not the case.

On the basis of comparison of differential goodness, one constructs a statement of differential preference; in this case, we prefer q's being the case to p's being the case.

Formal machinery of analysis. Rescher offers a systematic groundwork for developing a logic of preference around these alternative modes of goodness and preferability. Building with the elements p, q and their negations, one is able to construct a set of four possible worlds, to each of which one can assign an "index of merit" measure #, as represented in the following table:

Possible worlds	#-values
W_1: p & q	a
W_2: p & not-q	b
W_3: not-p & q	c
W_4: not-p & not-q	d

From the #-values for the possible worlds one is able to compute #-values for any component x of those worlds by finding the arithmetic mean of the #-values of all the worlds in which x occurs. Thus in the example above, #(p) = a+b/2; in case D, $\#(p) = \frac{(\$2+\$1+\$2-\$100)}{2}$. The measure #(p) is a measure of the first-order goodness of p derived from merit values assigned to the worlds in which it occurs. The corresponding mode of preference Rescher represents as $pP^{\#}q$ as shorthand for #(p)>#(q). Similarly one can find a differential measure of goodness for p (represented by *p) by finding the difference of the #-values for the worlds in which p occurs and those in which it does not occur. In the table above, $*(p) = \frac{a+b}{2} - \frac{c+d}{2}$. The statement *(p)>*(q) is represented by pP*q. Thus by developing indices of merits for possible worlds, one is able to calculate first-order and differential measures of goodness for the components of those worlds, and on that basis develop a preferability ranking of those components.

Practical Reasoning

The machinery of analysis is applicable to a fundamental decision-making process termed by Rescher "practical reasoning, the lines of ratiocination people engage in when seeking well-based answers to questions regarding what is to be done." Practical reasoning attempts to link component courses of action to valued goals or possible worlds.

Any such line of reasoning must conclude in a "task thesis," with the following form: "One (good or sensible) thing for X to do (under the existing or postulated circumstances) is to make it true that p," where "p" is understood as an "action performance statement specifying an actor, a specific action and an occassion. A task thesis is an "in-the-first-analysis consideration", outlining one reasonable course of action; it does not imply an "In-the-final-analysis judgment," specifying the best course of action.

Because the practical reasoner may not be the actor, task theses may be of three sorts. The first, in which the reasoner and the actor are the same, constitutes a "deliberation-derived judgment" in response to the question, "What would be a good thing for me to do?" The second sort, an advice-presenting judgment, is a second-person response to the question "What in your judgment would be a good thing for me to do?" Finally, act-advisability judgments answer the question "What would be a good thing for him to do?"

For a task thesis to be appropriate or meaningful, the act specified must fall within the actor's power. For example, the task thesis "One good thing for X to do is to make it true that Y makes it true that x at time t" is senseless unless three conditions hold--X must have control over Y relative to the class of actions of which x is a member; Y must have the power to perform x; and t must be an effectively accessible time.

Task theses are subject to a variety of constructions, or more precisely, may be constructed on a variety of bases of evaluation. Rescher suggests five:

1. The moral or deontic
2. The legal
3. The prudential
4. The voluntaristic
5. The synoptic, taking into account the four above.

Task theses are derivations of "practical principles", general principles which, if introduced as premises to arguments concluding in task theses, will render the arguments deductively valid. Rescher offers two examples:

(P1) Whenever anyone wants to achieve an objective and cannot achieve this objective unless he performs a certain action, then one thing for him to do is to perform this action.

(P2) Whenever someone will land in the soup unless he performs a certain action, then one thing for him to do is to perform this action.

Such principles are transformed into task theses by the introduction of factual premises.

Inconsistency and Optimization: Task theses meaningful in a single situation can be inconsistent with one another, as when X would be well advised to do A and to do B, but A and B are incompatible. The situation forces the generation of an optimal task thesis, of the form "the very best thing for X to do is to make it true that p." The generation of task theses is related to the stage of deliberation; selecting an optimal task thesis is the stage of decision-making. The settling upon an optimal task thesis involves the movement from prima facie desires or values to over-riding

desires, while the generation of general task theses involved the interaction of prima facie desires, practical principles and factual premises. There is in addition a third kind of task thesis, termed by Rescher an "optimum-derivative task thesis," which is defined as a component of an optimal course of action, though in isolation it may be highly non-optimal.

These distinctions lend themselves to the assertion of a logic of practical reasoning. At the outset one is confronted with a set of courses of action (each comprised of a set of component actions) and a set of possible and feasible goals. The first step is the realization that some of the goals are meritorious and some are not; this of course is a matter of evaluation. Next, the course of action must be linked to the goals through the generation of task theses, that is, through the application of practical principles in the face of factual premises. This linkage of action to goals permits an evaluation of the courses of action in relation to the goals to which they are linked. This evaluation consists of a dual measure of each component act, first in terms of its independent embodiment of a want, and secondly in the extent to which it will yield, with other component acts, some ultimate goals. Rescher summarizes as follows:

> Practical reasoning has to do with rational deliberation regarding the "things to be done" by us or others in the circumstances in which we find ourselves. At this general level of plausible things to do we find ourselves confronted with alternative courses of action which, if not abstractly incompatible, are at any rate circumstantially in the face of finite resources of time, money, etc. The rational process of decision-making involves the comparative assessment of these alternatives in the attempt to fix upon one alternative to determine a coherent pattern of action that represents "the best thing to do." At exactly this juncture of the comparative assessment of alternative courses of action, the logic of the situation requires recourse to values as the requisite means for effecting the necessary choice among mutually incompatible alternatives."

Literary Criticism: A Parallel to Evaluation

In the sense of "making judgments of worth," literary criticism can legitimately be regarded as a form of evaluation. To do so is profitable to this endeavor, because literary criticism has a rich tradition: critical theories have closely followed major western philosophical trends since Socrates, and theorists have been reflective in their analysis and assiduous in their documentation. The body of literary theory thus constitutes a well-formed example suggestive of patterns and problems likely to occur in any stream of evaluative thought.

Lionel Trilling (1970), in his compact overview to a collection of critical essays, addresses the question, "What is criticism?." In its derivation from the Greek word meaning judgment he finds its essence: "A critic does more things with literature than judge it, but his judicial function is involved in everything else that he does." That literature should have generated an enterprise for judging it reveals, to Trilling, an important aspect of literature -- "that it is an enterprise which is inherently competitive." The critic as judge marshalls whatever evidence he deems necessary to select from among competing pieces of literature those with the greater worth. The competition has sometimes been explicit, as the Greek contests, and sometimes been denied, as with all but a few contemporary American writers, but it has always, argues Trilling, been present and intense.

The content of competition, and therefore of judgment, is of several kinds. There is first the judgment of technical accomplishment. A work of art is a commodity produce by an artisan; it is, as Cleanth Brooks asserts, "a made thing," and can be judged for the presence or absence of elements

of craftsmanship. To judge this aspect of literature the critic must assume the role of connoisseur, with "a pretty thorough knowledge -- although not necessarily a practical command -- of the technical means the artist or craftsman uses." He must understand the potential difficulties of the task of writing and be able to perceive the manner in which these difficulties were overcome or poorly handled.

The second and third kinds of judgment derive from quite another property of literature: not its preciousness, but its power. Power spawns two issues to be adjudicated: "the legitimacy of any single author's claim to assert dominion over his readers and the conflict of claims among rivals for power." Modern critics have attended to this latter issue less than their predecessors (Mathew Arnold's attempt to create a cannon of the great poets of the world is noted), though antagonisms among authors (Joyce and Lawrence, for example) are conventionally formalized and perpetuated by schools of critics. More important in modern criticism is the first issue: "By what right does (an) author invade our privacy, establish his rule over our emotions, demand of us that we give heed to what he has to say, which may be wholly at odds with what we want to hear said if we are to be comfortable?" The critic must assume this right in the abstract; his task is to affirm the right in some instances. where it has been denied by the public and other critics, or to reverse assertions of this right by earlier courts.

These three kinds of judgment -- the craftsmanship of the thing, its "greatness" relative to other things, and its right to hegemony over the audience -- consitute the set of decisions which a critic must make. The second dimension of variation is the criteria against which the decisions

are made -- "the successive assumptions about literature on which criticism has operated." Trilling relies on M. H. Abrams (1953) for his survey of this facet of critical history.

Abrams observes that all comprehensive theories of art comprise four elements, receiving from theory to theory varying degrees of emphasis. These are the work, the artist, the subject or "universe" and the audience. Variation among theories is largely a function of the differential emphasis that is placed on these four; emphasis likewise determines the kind of judgments that follow from the theory. The following examples illuminate this principle:

(a) The ancient Greeks thought of art primarily in terms of the relation between the work and the universe, the essence of art being its imitation of some part of the universe. Plato held art in low esteem, it being twice removed from reality. Aristotle chose to emphasize the "representative" meaning of mimesis over the "imitation" meaning preferred by Plato, leading him to conclude that art generates a reality distinct from the reality of every sense... Mimetic theories concentrating on the relation of the work of art to the universe and on the truth of the imitation persist today, having grown from the nineteenth century doctrines of realism and naturalism to "soci list realism," the official aesthetic of the Soviet Union. Moreover, the mimetic assumption is a first principle in the artistic judgment associated with popular Western culture.

(b) The Renaissance gave birth to a set of critical theories which Abrams labels "pragmatic" because they look at a work of art primarily as an instrument for getting something done. Pragmatic theories concentrate on the work of art and the audience. The first purpose of art is to give

pleasure to the audience, and through that to instruct or edify. Early pragmatic theories (the first of which was formulated by Horace) focused on the moral effect of poetry on the audience. The moral concern persisted into the eighteenth century as an intellectual principle; it persists even now as a social principle for judging the value of art. The later stages of pragmatic theory were less concerned with moral effect than with the degree and kind of pleasure given the audience and the means by which it was achieved. In all such theories, the audience was the controlling element; the artist was expected to alter his behavior in a calculated manner to appeal to the natural propensities of the audience. As in the case of mimetic theories, pragmatic theories have lost intellectual authority among literary critics today, but persist and in fact thrive in other realms of art judgment. Most not able of course is mass communications evaluation (discussed below) and the legal principles of "prurient interest" "redeeming social values" applied in pornography decisions.

(c) The late eighteenth century brought a shift in the focus of criticism away from the work of art to its maker, or more specifically, to the work of art as a product of its maker. Wordsworth's famous "All good poetry is the spontaneous overflow of powerful feelings" summarizes the core of these new theories, which Abrams calls "expressive theories." The work is judged by the degree to which it matches "the intention, the feeling, and the actual state of mind of the poet while composing." The work is seen not as a window to the world, or a vehicle of instruction, but as a window to the soul of the poet. The proponents of expressive theory sought to discern the sincerity of a work; but more important was the authority with which they invested the poet. Reversing the pragmatic conceptualization,

the poet became the criterion by which the audience should judge itself. "The poet becomes a law unto himself which he hands down to the audience and critic, if they but have the humility and grace of spirit to receive it."

(d) Modern theories, which Abrams calls "objective" have eliminated from consideration all but one component of the four-part literary enterprise: the work itself. The work of art is viewed in terms of the formal relationship of its parts, without limiting relationships to the artist, the universe or the audience. However, a wholly objective theory has never been successfully manifest. I.A. Richards, considered by Trilling the founder of modern criticism, formulated the most technically rich objective theory in his Principles of Literary Criticism with specific attention to the process of communication, implying the importance of the audience. However, Richards asks not "What is communicated?" but rather, "How is communication made possible?"

In Practical Criticism: A Study in Literary Judgment, Richards writes that one of his intentions in producing the book is to "provide a new technique for those who wish to discover for themselves what they think and feel about poetry (and cognate matters)and why they should like or dislike it." This he forwards as part of a "general attempt to modify our procedure in certain forms of discussion... the whole world, in brief of abstract opinion and disputation about matters of feeling." Practical criticism is, relative to this ambition, an intellectual modus operandi for contending with questions which can not be answered by the introduction of facts to precise hypotheses nor by application of conventions. It is founded on one distinction: that between what seems to be said by a speaker

or writer and the mental operations which led to it, Richards terming the first a "statement" and the second an "expression." "We cannot profitably attack any opinion," he asserts, "until we have discovered what it expresses as well as what it states." The discovery of these two kinds of meaning forms the core of critical thought, for "the one and only goal of all critical endeavors... is improvement in communication." He does admit to a valuation aspect of criticism, but feels that this is decided by "our own inmost nature and the nature of the world in which we live" only after the "mental condition" of the poem has been completely revealed, after that is, the problem of communication is perfectly solved.

The framework of judgment within which the literary critic operates can be conceived as a three-by-four matrix, with three kinds of decisions each possible within four major theorectical perspectives. (It is doubtful of course that any unitary body of criticism has blanketed the matrix, but no category is analytically void.) These judgments, however, constitute only one aspect of the critical enterprise; Trilling identifies two others which, though they inform judgments, may be understood as separate from it. These aspects, with which he permits himself to assert a modest analogy to science, are description and the treatment of causation.

Description is generally the first undertaking of the critic. The work is located in a genre, enabling the critic and reader to remark the ways in which it conforms to the general structure of works of the same sort and of course the points at which it is in variance. As an outgrowth, the critic will naturally turn to a description of the particular form and structure of the work at hand. This phase of description has been especially occupied with discerning the unity of the work, a task at times simple, as in the rigorously unitary Divine Comedy, and at times most difficult:

Ulysses was once considered inchoate, but with shifts in opinion is now considered by some to be too mechanical. To a point, description can be quantitative. The mapping of verse forms is an easy example of this; more complex examples are being generated by contemporary critics through content-analytic computer applications. But at some point description must move from the objective, quantitative, to the interpretive. In the course of telling a reader what the work is really like, the critic can hardly avoid forwarding translations of the work to the purpose of saying what it is about. Here, before judgments are formed, and only tangentially associated with critical theory, is a source of the controversy of critics.

Among modern critics, the question of causation has assumed considerable weight through the belief that "comprehension of a literary work can be advanced by knowledge of the conditions under which it came into existence." Causation has been attributed to two anterior sources: the socio-cultural milieu in which the work was created, and the biographical world of the creator.

The notion of cultural causation emerged in the nineteenth century with the sciences of culture -- sociology and anthropology. Greatly simplified, the idea is this: A culture above all imposes "a unitary spirit at work"; this spirit conditions all elements within the culture, as they condition each other. A literary work is therefore bound to the culture in which it occurs: it is "a manifestation of a certain kind of mind." This is not to deny the diversity of any culture, but Trilling holds with Marx that the diversities are mutually contingent, and can be reduced to stable principles. Thus the spirit that moves the work can be predicted from the culture in which it occurs, and which it in turn documents.

Biographical causation has been attended by critics in two distinct modes. The first Trilling considers an aesthetic exercise: the mapping of biographical facts of the author into his works, either as a foundation for understanding specific works or for tracing the development of the body of work. Pleasing as it may be, this line of analysis falls short as a general critical principle because it is so starkly particularistic: the man may account for the work, but how account for the man? The second mode of attributing biographical causation attempts to overcome this: it is the growing stream of psychoanalytic criticism. Trilling notes that psychoanalysis has been used to two ends in literary analyses: directed toward the author, to explain the roots of creation, and directed toward the work itself, to reveal its meaning. The former, he argues, is fated to only limited success because "it is beyond the power of psychoanalysis to say why one artist is great while another is not." The second use does not have this limitation, and constitutes an informative analytic tool for all critics.

Evaluation and Mass Culture

The introduction of the radio and television was followed close upon by two intellectual phenomena which persist today. One was the advent of serious research concerning the social impact and value of these mass communications media, and the other was a loud outcry of intellectuals and liberals generally, proclaiming that mass media, and the mass culture they transmitted, were debasing the intellectual and cultural heritage of man. Traditionally, questions of cultural debasement were the province of humanist intellectuals such as the literary critic. However, the issues

raised concerning mass culture fell well beyond the domain of the traditional critic, involving as they do complex issues of social structure and relationships. The arguments about mass culture posed researchable questions with an evaluative substructure. As a result, the man of letters was supplanted by the social scientist as the arbitrator of the debate. A new intellectual perspective had to emerge: that of the researching critic.

A measure of that emergence is provided by Culture for the Millions? (1959) a collection of papers edited by Norman Jacobs. The papers were first presented at a 1959 conference, sponsored by the Famiment Institute, concerning the mass media and the growth of an American mass culture. Among the participants were social scientists, educators, media administrators and artists. Despite the fact that radio research, the foundation of mass communications research, had been an established enterprise for thirty years preceding the conference, there is evident among the participants a confusion about the appropriate mode of response to the question which forms the title of the book. As Bernard Berelson asked during the conference, "Do we want to understand the phenomenon of mass culture; do we want to evaluate it; or do we want to change it?" As was demonstrated in the case of literary criticism, it is difficult to analytically separate these acts: the critical judgments were nested in a context of understanding, and at the same time were intended to contribute to understanding. A debate that took place within the structure of the conference underscores the inter-relatedness of understanding and evaluation.

Understanding mass culture. Edward Shils, whose speech keynoted the conference and opens the book, argues that mass society is something

fundamentally different from prior societies in structure and functional relationships. The primary difference is precisely that it is a society of the masses, in that "the mass of the population has become incorporated into society." The central institutions and central value systems of society have extended their boundaries outward, so that most individuals are closer to the center than ever before. This single characteristic generates a set of derivative differences, of which Shils notes the following: (a) the diminished sacredness of authority, accompanied by a loosening of the power of tradition; (b) the dispersion of charisma from center outward manifested in a greater stress on individual dignity; (c) the dispersion of civility throughout society, with the idea of a citizenry coterminous with the adult population; (d) universal industrialization, bringing the various parts of society into frequent contact and providing the resources for new experiences of sensation, conviviality and introspection; and (e) enhanced individuality, yielding an increase in the value of personal relationships. Given these observable characteristic differences in mass society, one is directed toward a search for equally striking differences between mass culture and its traditional predecessors. The differences Shils does find are differences of degree. The fundamental categories of cultural life, he asserts, are the same in all societies; however, there are "profound variations in the elaboration of these elements." To characterize these differences, Shils chooses two dimensions of variance: the intrinsic quality of the cultural object and the amount of objects of given quality consumed in the society. This is by no means the only approach to the problem: other conferees suggested that the functions served by the cultural objects tell more in their variance from one society to another than does the quality of the objects. But one cannot dismiss

Shils. He finds that characterizing cultural objects as superior, mediocre or brutal is useful, employing the following labeling principles:

> Superior or refined culture is distinguished by the seriousness of this subject matter, i.e., the centrality of the problems with which it deals, the acute penetration and coherence of its perceptions, the subtlety and wealth of its expressed feeling...
>
> The category of medioore culture includes works which, whatever the aspiration of their creators, do not measure up to the standards employed in judging works of superior culture...
>
> At the third level is brutal culture, where symbolic elaboration is of a more elementary order... The depth of penetration is almost always negligible, subtlety is almost entirely lacking, and a general grossness of sensitivity and perception is a common feature.

Clearly classification of cultural objects according to these definitions is itself a difficult task with considerable sources of ambiguity. Nonethaless, Shils feels that, given a large perspective, one can make statements concerning the proportional production and consumption of the three types of cultural objects in a given society. Further, he feels that this is a correct first step for an analysis of the place of cultural objects in the society, and conversely the impact of social structural features on the cultural stock. Shils' labeling is intended as a taxonomy, not an evaluation. Shils' taxonomic evaluation of the objects comprising mass culture can in fact precede his understanding of mass culture precisely because it is his evaluation alone; the value system employed in assigning the terms "superior", "mediocre", and "brutal" is not asserted to be the value system embedded in the mass society.

Hannah Arendt considers his approach "old-fashioned" and "snobbish"; "the only nonsocial and authentic criterion for works of culture is," she argues, "their relative permanence." Any other evaluation must begin with some notion of what the cultural objects are supposed to do. Then

you can with more or less ease determine whether and to what degree they do it. The function the thing is to serve becomes the value-scale by which it is assessed. Relative to the question of a mass culture in a mass society, Arendt offers an interesting notion of the differences in the functions served by culture in society and in mass society. She asserts that in society the dominant function of cultural objects was as a social commodity which could "be circulated and cashed in on as social coinage for the purpose of acquiring social status." Cultural values were exchange values, and the objects to which they were attached were likewise exchanged, but never consumed. "Mass society, on the contrary, wants not culture but entertainment:"

> The commodities the entertainment industry offers are not "things" -- cultural objects whose excellence is measured by their ability to withstand the life process and to become permanent appurtenances of the work -- and they should not be judged according to these standards; nor are they values which exist to be used and exchanged; they are rather consumer goods destined to be used up, as are any other consumer goods.

Shils noted that, while "superior" culture production was increasing in mass society, mediocre and brutal production were increasing at a far greater rate. Arendt's notion explains this away: it is the need to be entertained that is increasing so rapidly, as one concommitant of mass society is the introduction of large blocks of vacant time. Thus to Shils' concept of cultural objects as vehicles for the penetration and exposition of content, essentially an intellectual function, Arendt adds two other functions -- as elements of social capital and as entertainment. Neither of these aspects of cultural objects entered into Shils' evaluative calculations. Only after developing an understanding of the place of mass culture in mass society, as Arendt, Van Den Haag and Shils provide,

can one begin an evaluation within a cogent framework.

Evaluating mass culture. Together, Shils, Arendt and van den Haag have created a framework of understanding in which evaluation can be conducted meaningfully. Though it is not entered into as a cooperative venture, the three together conduct a crude evaluation within that framework, though the evaluation is not empirically rooted (at least, the empirical root is nowhere evident). The evaluation consists of the following arguments:

Shils argues that the growth of mass culture is doubly damaging. First of all, because he finds that mediocre and brutal cultural objects are preponderant in the cultural stock, he argues that the likelihood of the consumer coming in contact with superior objects is diminished and still diminishing. Worse, because mediocre and superior cultural objects often coexist in the same genre, the ability of the consumer to make the critical distinctions will diminish as the genre is overrun with mediocrity. Turning the problem over, he addresses the problem of maintaining a social capacity to produce superior culture, and finds that here too mass culture is having a negative effect. Most notably, the market demands for objects of mediocre culture have placed unprecedented pressures on the members of the intelligensia to lower their productive standards. As this occurs, as people with legitimate intellectual credentials yield to the demand for popularization, the consumer is again affected; if one cannot be certain that a superior source is producing legitimately superior culture, again the basis for discimination is weakened. That Arendt may be right in dismissing this as old-fashioned and snobbish

is beside the point; what counts is that Shils has blended the objectives of the social scientist and the critic to generate a socio-cultural evaluation.

Arendt, of course, is capable of the same thing. She insists, however, in separating the standards applicable to what Shils calls superior and mediocre culture. The function of mediocre culture, which to Arendt means the culture transmitted through mass media to a mass audience, is to entertain. To evaluate that alone, one need simply ask the audience if it is being satisfactorily entertained. If the sight of a man slipping on a banana peel is more entertaining than the New York ballet, so be it. As Arendt points out, superior cultural objects have traditionally served a quite different function, that of providing a capital for social status, a phenomenon which she terms "cultural philistinism." For reasons that will be presented below, she finds this cultural philistinism culturally damaging. One positive aspect of mass culture, she asserts, is that it has observably reduced the extent of philistinism. Thus mass culture receives two positive credits: it is entertaining the masses, and it has reduced an unwanted phenomenon. From the perspective of the functional evaluator, it is defensible.

However, it is against that perspective that Arendt turns in conclusion: "if we wanted to judge an object by its use value alone, and not also by its appearance, we would first have to pluck out our eyes." The tradition of aesthetics has nothing to do with the tradition of functionalism, yet both are fundamental to our cultural stock. Mediocre objects are only incidentally intended to succeed by aesthetic standards; they must above all pass the test of the function of entertainment. But the superior objects are made only to succeed aesthetically; cultural

philistinism is odious in that it turns these objects into functional elements, obscuring the intent of their creator. And mass culture is threatening to do the same thing, Arendt warns. As the demands for entertainment increase, they begin to outstrip to production capacity of the mediocre intelligensia. When that is the case, the producers turn to the closest available stock of cultural objects, the heritage of superior culture. Specifically, they begin to "popularize" these objects for mass consumption. Consumption is Arendt's concern, because consumption is the antithesis of endurance, which is the test of superiority in aesthetics. "A consumers' society does not know how to take care of the world and the things which belong to it; the society's own chief attitude toward objects, the attitude of consumption, spells ruin to everything it touches." Not only does this attitude threaten the erosion of our cultural stock, it threatens the continued production of it: Arendt cites Richard Blackmur's contention that the malaise among intellectuals is not attributable to the incursion of the masses into their world, but rather to the incursion of the popularizers and digesters.

Thus Arendt offers a deliberately contradictory evaluative conclusion: in its own terms, mass culture is successful, but in its incursion into the realm of traditional, "superior" culture it is long-term negative impact. Again, it is simultaneously evaluation and theory; the roles of critic and social scientist are tightly intertwined. In fact, with both Shils and Arendt, it is impossible to separate the critical, evaluative mode from the social scientific mode of analysis. Shils begins his analysis with an evaluative taxonomy; Arendt bases her analysis on the coexistence of distinct and unrelated value systems. The inextricability of

disciplined analysis and evaluation found here should not be surprising: throughout this essay we have encountered it again and again. Though these three discussions are in no way intended to present a comprehensive view of humanistic evaluation, they suffice as a foundation from which to generate a working image of it. The image that emerges, from Rescher, Trilling, Richards, Shils and Arendt, is that humanistic evaluation is a fundamental intellective process never far away during the conduct of sociocultural analysis.